SUBSURFACE INVESTIGATION REPORT

UNITED AIRLINES

NEWARK LIBERTY INTERNATIONAL AIRPORT
HANGAR 14
BREWSTER ROAD
NEWARK, NEW JERSEY

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1.0 INTRODUCTION

This report presents the findings of subsurface investigation activities performed at United Airline's (United's) Hangar 14 facility located in Newark Liberty International Airport, Newark New Jersey. A site location map and site plan is presented in ***Figure 1.*** The Hangar was utilized by United as their primary ground service equipment maintenance hangar at EWR until March 31, 2006 when United terminated its lease and vacated the premises. The site is currently owned by the Port Authority of New York and New Jersey (PANYNJ) and is reportedly unoccupied.

The hangar historically used hydraulic fluids which reportedly contained Polychlorinated Biphenyls (PCBs) prior to PCB regulation under the Toxic Substances Control Act (TSCA). Hydraulic fluids at the hangar were reformulated to eliminate PCBs so that no virgin materials at the site contained PCBs. There is one area of residual PCB-containing fluid in the hydraulics system that operates the hangar bay doors. Although the historic PCB-containing hydraulic fluid was removed and the hydraulic system was decontaminated in 1994, there has apparently been some leaching of PCBs from system seals back into the hydraulic fluid. A PCB Management Program, including a Risk-Based Disposal Approval, will be developed in coordination with the USEPA to address the hydraulic system and any other PCB impacts at the site following submittal and acceptance of this report.

The presence of PCB-containing hydraulic fluid historically at the hangar is a potential source of PCB detections in sludge, wastewater, and concrete cores at the site. During the PANYNJ's removal of an oil / water separator system (OWS) on the Hangar 14 property, PCBs were detected in soils from within the OWS excavation area. Although it is possible that the PCBs detected during OWS removal were present in the fill materials used during the construction of the airport, United voluntarily initiated a follow-up investigation which included surface wipe sampling, sludge sampling, water sampling, and concrete core sampling to identify and characterize the source of the PCBs. United notified the USEPA, NJDEP, and PANYNJ immediately upon confirmation of the presence of PCBs at levels exceeding 50 parts per million (ppm) in sludge samples at the facility. The results of the follow-up study were then documented in a PCB Characterization Report which was provided to USEPA, the New Jersey Department of Environmental Protection (NJDEP), and PANYNJ in April 2005 (Apex, 3/2005).

The PCB Characterization Report concluded that PCBs were present in floor drain system sludges and in concrete cores collected from the hangar floor. The study further identified the hangar door hydraulics system as a potential of PCB impacts within the hangar. Concerns regarding the integrity of the floor drain system, coupled with the findings of the PANYNJ sampling during OWS removal lead to the recommendation for a subsurface investigation to evaluate soil and groundwater quality at the site. This report documents the results of the subsurface investigation performed.

1.1 Purpose and Objectives

The work completed was designed to determine the absence or presence of PCBs in the subsurface underlying and adjacent to Hangar 14, and to obtain data which can be used in the risk assessment as part of development of the site-wide PCB Management Program and the Risk-Based Disposal Approval (RBDA) application.

Specifically, this investigation has been designed to meet the following objectives:

- Investigate and determine the nature and extent, if any, of PCB impacts to soil and groundwater;
- Investigate upgradient groundwater quality for contaminants possibly migrating onto the H-14 property;
- Collect sufficient data for use in a risk assessment to support an RBDA application.

1.2 Site Location and Description

United Hangar 14 is located at Newark Liberty International Airport in Newark, New Jersey. The hangar is a 45,000 square foot rectangular structure dating to the original airport construction period (c. 1958). The floor of the hangar is constructed of concrete which is 6 to 11 inches thick, although thicker concrete sections have been reported by some United employees. The main features of the hangar relative to the PCB characterization study are the floor drain system and the hydraulics system used to open and close the hangar bay doors. The hydraulic system has been identified as one likely source of PCB contamination at the site and the floor drain system has been impacted through contact with hydraulic fluids contaminated with PCBs. A site plan indicating the general layout of the hangar, including the hydraulic system components and the floor drain system, is provided in ***Figure 2.***

1.2.1 Site Operations and PCB History

The hangar was operated by United until March 31, 2006 to maintain aircraft and ground services equipment (GSE). The facility also included equipment storage and offices on the

second floor. The site was utilized by United as their primary maintenance hangar at EWR. The site is currently owned by the PANYNJ and is vacant. Historically, various types of preventative and corrective maintenance of aircraft and ground service vehicles were routinely performed at the hangar. The hangar was also used for storage of large equipment such as fork lifts, lift trucks, aircraft tow vehicles and other equipment needed for jetliner maintenance and operations. Currently all routine maintenance of aircraft has been eliminated from Hangar 14.

With respect to the presence of PCBs at the hangar, it has been determined that a previously used hydraulic fluid was one likely source of PCB contamination at the hangar. Hydraulic fluid containing PCBs had been used historically prior to EPA regulation of PCBs and residual PCB remained in the hydraulic system after elimination of this product in 1977. A previous decontamination event in 1994 removed the majority of PCBs in the hydraulic system; however, it is probable that PCBs were adsorbed into some remote porous elements of the hydraulic system and may have "leached back" into the hydraulic oil after the 1994 decontamination event. PCB–contaminated hydraulic fluid could have contacted the floor, and subsequently entered the floor drain system, during maintenance events and from undetected leakage over time. Some PCBs detected in the soil where the former oil water separator was located could also be associated with existing historically PCB contaminated fill material in the area. This is the only reported PCB usage at the site other than historic transformers which were not located anywhere near the areas impacted by PCBs.

As mentioned in the introduction, PCBs were recently detected at the site during the excavation of a former oil/water separator. Soils in the excavation area and sludge from the OWS were analyzed by the PANYNJ and determined to contain PCBs. Immediately upon identifying PCBs in the OWS sludge, discharges to the entire floor drain system from the hangar were discontinued as a precautionary measure. A temporary holding tank and pre-treatment system was installed in June 2004 to allow hangar operations to continue while the nature and extent of PCBs was investigated. This temporary system was installed to capture all wash water and/or spills that occur at the hangar prior to a controlled, pre-treated, and monitored discharge to the PANYNJ industrial wastewater system.

A preliminary PCB field screening program was initiated in June 2004 to follow-up the initial PCB detections. Initial PCB screening conducted from June to July 2004 identified PCBs in sludge and wastewater within the floor drain system as well as within the hydraulic fluid used to operate the hangar door system. Screening wipe samples did not identify any areas of concern relative to surface contamination or potential worker exposure. Based upon the results of the screening study, review of operations, and discussions with United staff, it was determined that previously used hydraulic fluid was one likely source of PCB contamination at the hangar.

Discussions with staff and review of historical drawings and physical inspection of the hangar also indicated that the integrity of the floor drain system warranted further investigation. Apex performed a comprehensive, under-slab geophysical study in August 2004, to evaluate the floor drain system integrity and existing under-slab conditions. The geophysical tests performed included ground penetrating radar (GPR) evaluation, an electromagnetic (EM) resonance survey, and line tracing with an electric charge. The geophysical survey concluded that there are voids under the existing floor slab and possible drain system integrity breeches. Based upon these initial results, additional floor drain integrity tests were performed in September to October 2004, confirming floor drain tightness concerns, based upon volume losses recorded during drain line testing.

Due to the physical system design, a pressure / vacuum precision line test was not practical; however, an integrity test similar to that outlined by the United States Environmental Protection Agency (EPA) to evaluate the integrity of concrete sumps was used. The testing procedure included plugging the main trunk outfall at each catch basin, filling up the drains with city water and noting any changes in water level at each drain location. The results of integrity testing indicated that two of the four drain lines could not be verified as tight. A sludge removal interim remedial measure (IRM) was completed in September 2004 to remove readily accessible sludge and contaminated wastewater from the drain systems.

After identifying the likely source of the PCBs and determining the integrity of the drain system, more comprehensive sludge, wastewater, surface wipe, and concrete chip sampling was conducted in September to October 2004, to characterize the site and to develop an appropriate PCB management program. The sample results indicated contaminated sludge accumulation in all drains sampled and the four (4) associated catch basins. In addition, concrete core samples indicated the presence of PCBs within the concrete floor at the hangar. All PCB wipe samples have been reported as containing no PCBs. The PCB Characterization Report documenting all work performed since the June 2004 detection of PCBs at the OWS system was completed and submitted to USEPA in April 2005.

Since submittal of the PCB Characterization Report, United has discontinued all site operations. An additional sludge IRM was completed in March 2006 to remove residual sludge from the drains, catch basins and interior drain manifolds. The March 2006 IRM also included jetting of the lines to more aggressively remove contaminated media. Concurrently with the March 2006 sludge removal IRM, United also replaced the oil in the hydraulic system and post oil change results have indicated that the hydraulic system oil does not contain PCBs at levels exceeding 50 ppm. Upon completion of hangar exit IRMs, all readily accessible sludge from the drains and lines has been removed and no residual PCB above 50 ppm remains in the hydraulic system.

1.2.2 Immediately Adjacent Properties

Immediately adjacent properties include the United Cargo Hangar to the east and a Sky Chefs building to the north. All other adjacent space is open runway and taxiways serving the Airport. There are no residential properties within ½ mile of the subject property. Industrial buildings are located off the airport property approximately 1 mile to the west.

United Airlines Cargo Building 327 is located next to Hangar 14 to the east. This is the site of a former fuel farm for the airport. The hangar was constructed in 2001 and houses the UAL Cargo operations at Newark Liberty International Airport. According to available record reviews, petroleum contaminated soil was encountered and removed from the site during construction of the hangar. There are no other known environmental issues with this site, including any PCB issues; however, PCBs have reportedly been detected in the fill materials that were used to construct much of the present-day airport grounds.

The Sky Chefs building is directly north of the Hangar 14 site. Operations at the Sky Chefs building primarily consist of food preparation activities. We have no records on this site. There are no known environmental issues with this site.

1.2.3 Neighboring Community

There is no relevant neighboring community as this site is deep within the airport property line. Outside the airport the community consists primarily of heavy industry and a major traffic corridor for the North East United States. There are no residential properties within at least ½ mile of the site.

2.0 PHYSICAL SETTING OF STUDY AREA

This section briefly overviews the physical setting of the Hangar with respect to its surrounding environment.

2.1 Regional Setting & Land Use

The Hangar 14 property is located at Newark Liberty International Airport in Newark, New Jersey. The area is highly industrialized and used as an airport. Airport operations typically include flight operations, cargo transfers, maintenance of aircraft, GSE, and misc. support services for patrons (i.e., restaurants, restrooms, shops, etc.). The airport generally consists of two types of areas, restricted access and public access. The Hangar 14 site is within a restricted access area and as such, is not readily accessible to the public. The subject property and its surrounding vicinity within a one-mile radius were observed to be located within the 100-year and/or 500-year flood zone provided by Environmental Data Resources, Inc. (EDR) in the EDR Radius Map with GeoCheck® Database. The site was not identified as being located within a mapped wetland area, nor was visual indication of wetlands observed by Apex during the site reconnaissance. However, the encompassing drainage trench around the airport grounds is identified as both State and Federal wetlands according to EDR.

The subject property and its surrounding vicinity within a one-mile radius were not observed to consist of earthquake epicenters or earthquake quaternary fault lines as identified by the National Oceanic and Atmospheric Administration (NOAA) and the USGS.

To the south, east and north of the airport complex are commercial and industrial sites. Immediately around the airport complex are several rental car agencies and hotels. The airport complex is bordered to the west by US Routes 1 and 9; to the north by Interstate 78 and US 1 and 9; to the east by Interstate 95 (New Jersey Turnpike); and, to the south by the city of Elizabeth, NJ. Beyond the major roadways lie heavy industrial and commercial facilities, such as Anheuser Busch, Inc. just northwest of Terminal A. In summary, the vast majority of surfaces are paved with little vegetation or wildlife. The entire region around the airport is heavily industrialized without any residential population.

2.2 Site Topography and Features

The site is built on a former landfill; the topography is flat with the occasional undulation of settling landfill throughout the site. There are no outstanding topographical features, other than pavement and asphalt areas. Small unpaved areas may be present near building entrances and in landscaped public areas.

According to the United States Geological Survey (USGS) topographic map of the area (Elizabeth, NJ-NY, 1967), the subject property is situated in a nearly flat area at a surface

elevation of approximately 9 feet above mean sea level. The natural land surface at the subject property slopes slightly to the east, but man-made structures have essentially eliminated all significant slope to accommodate airport operations. Surface water run-off most likely traverses the site via overland sheet flow and is directed to the onsite storm water management system. Apex did not observe standing water or wetland-type vegetation on the subject property during the site reconnaissance.

2.2.1 Site Geology and Hydrogeology

According to the Essex and Union County Soil Survey, as provided by the NJ Natural Resources Conservation Service (NCRS) covering the site, soils beneath the subject property are generally classified as Urban Land. These soils are described as highly built-up areas, consisting of more than 90% of the surface of the unit covered by asphalt, concrete, buildings and other impervious surfaces. Soil is highly variable, included are Udorthents, loamy and small areas of undisturbed soils. The undisturbed soils are commonly similar to soils in surrounding or nearby units. It is important to note that the entire airport area is reportedly built upon fill materials that may have some elevated (i.e., above ambient background) levels of objectionable contaminants including petroleum products, PCBs, and inorganics.

The geology at the site where the area is not filled is classified as part of the Piedmont Province. The Piedmont Province is chiefly lowland of gently rounded hills separated by wide valleys, with some ridges and isolated hills rising conspicuously above the general surface, which slopes gently from about 400 feet above mean sea level at its northwestern margin to sea level about Newark Bay. This geology is beach and estuarine deposits of the Holocene Cenozoic era. Due to the presence of fill in the area, the localized geology can vary significantly.

Soil boring logs were developed in connection with the investigation. Data obtained from the soil boring logs and from past site studies were used to better define the local soil types under the hangar and their influence on contaminant transport and fate. The boring logs from the current site investigation are attached in ***Appendix A.*** The soil boring logs confirmed that the site consists of landfill material below 10 feet with a clay cap present approximately 7 to 10 feet below grade. Coarse to fine sand bedding materials for the hangar floor were present at approximately 2 to 6 feet below grade with a layer of coarse aggregate present directly underlying the concrete slab.

Groundwater was encountered at the site at a depth of approximately 8 to10 feet below grade surface depending upon location. The groundwater flow direction, based upon gauging of on-site monitoring wells was inferred to be generally toward the north (see ***Figure 3***). However, the local flow direction can vary widely due to the presence of fill material. This groundwater flow direction is roughly the opposite of historical gauging events on-site

because of historical pumping related to the past groundwater extraction and treatment systems reportedly in the area. The wells were re-gauged and confirmation of the ground water flow was recorded. The wells were also re-surveyed to confirm elevations. The well elevations are almost all approximately 1.6 ft below what they were in the 1980's and 1990's when they were installed. The difference in elevation is apparently from the site settling caused by the landfill materials underlying the airport.

The ground water flow is generally to the northeast based upon the groundwater data that have been recently collected. Also, since most of this area is landfill and as such is of a heterogeneous nature, ground water flow could be obstructed or influence by the formation and have uncharacteristic anomalies associated with it. Most of the available previous site data are from a time frame when there was ground water pumping and re-injection at the site. This activity would most likely alter the true groundwater flow direction. Therefore, the current ground water flow, absent of any known influences, has been established as northeasterly. The most current well survey is attached as **Appendix B.**

3.0 SITE INVESTIGATION SCOPE AND PROCEDURES

This section of the report describes the scope of the field investigation and the procedures performed to meet data quality objectives.

3.1 Soil Investigation

This investigation consisted of the installation of twenty-nine (29) soil borings located throughout the Hangar area to identify possible areas of concern in shallow (above the water table) soils. The locations where Geoprobe borings were installed during the investigation and a summary of the analytical results are presented in ***Figure 4.*** Twenty of the borings were included in the initial investigation phase and nine additional borings were added near the former OWS system to further delineate detections of PCB in the initial sampling event.

Soil boring locations were selected to fully assess the two floor drain manifolds (i.e., drain piping main lines and laterals) that could not be verified as tight and to focus on areas where elevated PCB concentrations had been detected either in concrete core samples or within the floor drain system. Thirteen (13) soil borings were completed within the hangar and through the hangar floor. The remaining sixteen (16) soil borings were completed in areas outside the hangar near catch basins related to the floor drain system and adjacent to sewer pipes connected to areas where PCBs had been previously detected within the hangar footprint.

3.1.1 Scope and Procedures - Soils

Interior and exterior soil samples were collected by coring the concrete floor of the hangar (or the tarmac area) and advancing the Geoprobe through the floor into the overburden. Soil samples were collected using a track mounted Geoprobe unit equipped with a two inch outside diameter (OD) by five-foot long sampler. The Geoprobe unit included a hydraulic push/hammer that was used to advance the sampler. Initially, twenty (20) Geoprobes were installed at the site during the investigation. Two soil samples were collected at each of the twenty boring locations (total of forty soil samples). Nine additional borings were added after review of results from the initial soil sampling phase of work. The shallow soil sample at each boring was located at approximately 3 feet bgs and was designed to represent any impacts related to leaching of soils through the concrete floor structure or from leaking pipelines into catch basins. The deeper soil sample was collected at approximately 9 to 10 feet below grade and was selected to determine deeper soil impacts and to aid in the evaluation of possible PCBs in the fill materials.

All soil samples were field screened prior to analytical testing. The photoionization detector (PID) used during the field screening program was a Mini Rae which was calibrated daily to zero air and a 100 parts per million (ppm) isobutylene/air mixture in accordance with

manufacturer's recommendations. Soil screening was completed by holding the probe of the PID directly over the sample and then obtaining a PID reading. A response of less than 1 part per million (ppm) above ambient background using this method was not considered significant and was reported as not detectable. Based upon field screening results, select soil samples were submitted for laboratory analyses for Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs). All sample locations were submitted for PCB analysis.

The soil samples at each location were collected using a Geoprobe sampling rig. The sampling procedure consisted of pushing 1-inch diameter stainless steel rods to the desired sampling depth. The sampling rods were lined with acetate liners. Upon advancement to the desired depth, the sampler was retrieved from the subsurface and the sample liner removed from the stainless steel rods. The soil samples were transferred from the sample liners and placed into laboratory prepared sample containers. Following collection, the sample containers were labeled with a unique sample identification number, date and time of collection, sampler's initials, and the analyses requested. The sample containers were then placed into a cooler pending transportation to the laboratory. Chain-of-custody documentation was maintained at all times during the soil sampling events. All boreholes were filled with cement grout slurry and finished at grade to match existing conditions.

The soil gas screening results are presented in ***Table 1.*** Field screening results ranged from 0.0 parts per million (ppm) to 1,328 ppm. Soil boring logs are provided in ***Appendix A.*** The results of analytical testing are discussed in ***Section 4.1*** of this report.

Soil cuttings generated during drilling activities were placed into a Department of Transportation (DOT)-approved 55-gallon, steel drum for proper off-site disposal.

3.1.2. Soil Analytical Parameters

Soil analytical parameters were set per the NJDEP "Tech Rule" (NJAC 7:26E). Fifty-eight (58) soil samples were collected from shallow soil borings at depths ranging from 3 to 10 feet bgs. All samples were analyzed for PCB. Eight (8) samples were also analyzed for VOC and SVOC at the request of PANYNJ.

Following sample collection, soil samples were transported to EMSL laboratories (EMSL) of Westmont, New Jersey for analyses. Each sample was analyzed for PCBs using USEPA Method 8082. Select samples were analyzed for SVOCs using USEPA Method 8270c and VOCs using USEPA Method 8260b.

3.2 Groundwater Investigation

A limited groundwater investigation was also conducted. This sampling consisted primarily of sampling existing monitoring wells. The procedures followed during the groundwater investigations are discussed below.

A total of five (5) existing monitoring wells were included in the groundwater investigation. In addition, several temporary well points were installed in the field during Geoprobe boring installation. However, groundwater samples were unable to be obtained due to no yield. ***Figure 5*** indicates the monitoring well locations and a summary of the groundwater sampling results.

3.2.1 Scope and Procedures - Groundwater

The purpose of the groundwater investigation was to evaluate groundwater quality in the shallow zones throughout the site and to determine if there had been any adverse impacts to local groundwater quality with respect to PCBs. Additional VOC and SVOC sampling was performed upon request of PANYNJ.

Groundwater wells were located and water levels recorded before any purging was initiated. Although past documents had indicated multiple wells on-site, only five (5) suitable monitoring wells were able to be located for groundwater sampling. It is probable that other wells had been paved over as part of the routine aircraft tarmac maintenance program, abandoned or covered by heavy equipment. The results of well gauging are presented in ***Table 2*** and water table potentiometric surface maps are provided in ***Figure 3***. As indicated in ***Figure 3***, the inferred groundwater flow direction is toward the north which is the opposite of the historic groundwater flow direction while the former remediation system was operational. However, localized variations in shallow flow direction were prevalent. This is likely the result of the artificial cone of depression that was created on-site when extraction wells were historically operating in the area.

Once all ambient water levels were recorded, the wells were purged per NJDEP low flow protocol. The NJDEP low flow purge sampling protocol is attached as ***Appendix C.*** Well purge logs are provided in ***Appendix D***.

After the wells were purged sufficiently, groundwater samples were collected in 40 ml vials for VOC analysis and 1 liter jars for PCB and SVOCs. The vials were filled until overflowing, and a convex meniscus was formed. The vials were capped, inverted, and inspected for the presence of air bubbles. If bubbles were present, the vial was refilled until no bubbles were observed. The jars were filled until overflowing and capped.

3.2.2 Groundwater Analytical Parameters

Groundwater analytical parameters were set per the NJDEP "Tech Rule." Samples were collected from five shallow existing monitoring wells. All groundwater samples were analyzed for VOCs, SVOCs and PCBs. QA/QC samples were also collected and are attached with the analytical reports in ***Appendix E***.

The water samples were analyzed by EMSL laboratories (EMSL) of Westmont, New Jersey.

4.0 NATURE AND EXTENT OF CONTAMINATION

This section of the report presents and discusses the results of the on-site soil and groundwater investigation activities that were completed during the investigation. As discussed previously, this report focuses on PCBs. VOC and SVOC analyses were also completed at the request of the PANYNJ and data for these parameters is also included in the discussion where appropriate.

4.1 Soil Characterization

The results of the initial soil sampling program for PCBs (i.e. the initial 20 soil boring locations) are presented in ***Table 3*** and indicated graphically in **Figure 4**. The primary contaminants of concern (PCBs) were either non-detectable or detected at levels significantly below the TSCA action level of 50 parts per million (ppm) in all samples collected and analyzed. Of the 40 original samples collected and analyzed only three samples (and only two sample locations), indicated the presence of any detectable levels of PCBs: samples S18, S18D and S9D. Sample S9D was re-analyzed using recalibration due to the detection of Aroclor 1268, which is typically not analyzed in the method prescribed by EPA. Since the Aroclor detected was not typical of materials used at the hangar and was in a deep sample in the landfill zone, it is most likely background fill contamination. The other samples, (S18 and S18D) contained Aroclor 1242, which has been the PCB contaminant noted at the hangar. Sample S18, collected at 3 feet bgs, contained 3.1 ppm of Aroclor 1242. Sample S18D, collected at 10 feet below grade within the fill area, contained 33.0 ppm Aroclor 1242. Both samples contained PCB levels within the TSCA level of 50 ppm for classification as remediation waste, but above the NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) for total PCBs of 2.0 ppm. These soil samples were taken from the same boring location at different depths in the vicinity of the former OWS system removed by PANYNJ where PCBs were previously detected. Due to the presence of PCBs above NRDCSCs, additional sampling in the OWS area was performed to delineate the extent of the subsurface impacts. The results of this event are noted in the following section. All other PCB sample locations and depths did not contain any detectable levels of PCBs. After review of all soil analyses, the only area of concern for PCBs in subsurface soils was the area near the OWS system that had been previously defined. The data supports that the floor drain system detections of PCBs have not entered the subsurface at levels exceeding EPA TSCA limits.

In addition to the PCB analyses, the following samples were also analyzed for VOCs and SVOCs to screen for subsurface impacts at the hangar:

- S11
- S11D

- S13
- S13D
- S14
- S14D
- S18, and
- S18D.

The VOC and SVOC analyses were completed at the request of PANYNJ.

VOC sample results are summarized in ***Table 4***. There were only several VOCs detected above their respective method detection limits. Trichloroethene was detected at 0.360 mg/kg (ppm) in sample S-11D located under the southeast corner of the hangar. The 0.360 mg/kg detected is well below the NJDEP NRDCSCC of 1,000 mg/kg and is not considered a significant concern. Several butylbenzene isomers were detected at sample S18D adjacent to the former OWS area. However, all detections were less than 5 mg/kg and are not considered significant. The total VOCs detected at all sample locations was also well below the NJDEP NRDCSCC of 1,000 mg/kg for total VOCs. Based upon the data, no additional actions with respect to VOCs are warranted at this time.

SVOC sample results are summarized in ***Table. 5***. Although there were several SVOCs detected, all detections were relatively low level and present in the deep samples only, consistent with the fill materials at EWR. All detections were within NJDEP NRDCSCC for all parameters except for benzo[a]pyrene (BAP) in one sample. BAP was detected at 2.9 mg/kg in SD-13D which exceeds the NJDEP NRDCSCC standard of 0.66 mg/kg for BAP. All other detections of BAP met both industrial and residential soil cleanup criteria. Due to the documented presence of fill materials and the fact that only low level SVOCs were detected in all samples at the depth of known fill materials (there were no detections of any SVOCs in the non-fill depths), no additional actions with respect to SVOCs are warranted at this time.

4.2 Additional Delineation Sampling

Additional sampling was initiated to delineate an area which was found to have PCB contamination above the 2 ppm NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) threshold. Nine more borings were installed in the former OWS area in order to delineate the contamination. Samples were retrieved at three feet and eight feet BGS. The first set of borings, SB-1 through SB- 5, was installed on October 19, 2005 at depths of three feet and eight feet. Sample SB-3 had a PCB concentration of 2.9 ppm at a depth of 3', and 7.9 ppm at a depth of 8'. This is above the NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) 2 ppm threshold. An additional soil boring event was initiated

to further delineate the area on November 16, 2005. All samples collected during this event were under the 2 ppm cleanup criteria. PCB levels in all but one sample were non-detect and the one sample with detectable PCBs was SB-6 at 8 ft bgs. This sample had total PCB levels of 180 ppb, not requiring action per NJDEP soil cleanup guidelines. All sample results for the additional delineation borings are provided in ***Table 9.***

4.3 Groundwater Characterization

The results of the groundwater investigation performed are presented in ***Tables 6 through 8*** and summarized graphically in ***Figure 4***.

As discussed previously, the localized groundwater flow direction during this investigation was determined to be roughly the opposite of that documented historically at the site. Historically, there were several extraction points on the subject property that created a cone of depression and resulted in a local groundwater flow direction toward the south. The extraction points have been inactive and the groundwater flow direction at the site in the absence of the extraction well points is toward the northeast. As a result of this change in groundwater flow direction, two of the five existing monitoring wells (MW-2A and MW-24) are located down gradient of areas of potential concern. MW -24 is outside the hangar, directly adjacent to the hydraulic system components on the northeast wall and MW-2A is located at the north corner of the building. One of the wells is within the south area of potential concern (well MW-23) and the remaining two wells (MW-4 and MW-15) are southwest and south respectively. Both are roughly upgradient. Temporary well points were installed during the investigation to obtain additional groundwater quality data; however, there was insufficient well yield to collect samples from temporary well points.

The primary contaminants of concern (PCBs) were non-detectable in all well samples (see ***Table 6***). When the lack of PCBs in the sampled wells is considered with the non-detectable levels of PCBs in soil samples within the hangar footprint, it can be concluded that the presence of PCBs within the floor drain system at Hangar 14 has not adversely impacted soil or groundwater quality at the site.

Several low-level VOCs were detected in the groundwater samples (see ***Table 7***). Benzene was detected at 0.86 ug/l in MW-4 which is an upgradient monitoring well. Chlorobenzene was detected at 0.65 ug/l in MW-15 which is also upgradient of the hangar. The only compounds detected in down gradient wells was o-Xylene which was detected at 0.38 ug/l in MW-2A and 1.8 ug/l of 1,2 Dichloropropane in MW-24. This detection is within the NJDEP Groundwater Quality Criteria and is not considered a significant concern.

As indicated in ***Table 7***, all SVOCs were non-detectable except for bis(2-ethylhexyl)phthalate which was detected at 10 ug/l in MW-4. Since this detection is very low level and only present in one upgradient well, SVOCs are not considered a significant concern at this time.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the data collected during the investigation and the review of historical site data, several conclusions can be made regarding the nature and extent of contamination at the Hangar 14 site. Since the site is built on landfill dating back to the 1920s, low level VOC and SVOC contamination is typical in the site area. PCBs near the former OWS system were either non-detectable or detected at levels significantly below the TSCA action level of 50 parts per million (ppm) in all samples collected and analyzed. Two sample locations near the former OWS system (S-18 which contained 33 ppm total PCBs at a depth of 9-10 feet bgs and SB-3 which contained 2.9 ppm PCB at a depth of three feet, and 7.9 ppm PCB at a depth of 8 feet bgs) contained PCBs at a level exceeding the NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) for total PCBs of 2.0 ppm. Due to the presence of existing PCBs in the underlying fill at the airport, it is possible that some portion of PCB impacts in the soils at the site may be related to historic fill.

The following is a summary of the investigation findings:

- Although some contamination is present, the level of contamination is low with only two out of 49 samples containing PCBs above NJDEP NRDCSCCs and no samples containing PCBs above TSCA remediation waste limits. There were no PCBs found under the building slab in the shallow borings in the drain zone indicating that any PCB residuals within the concrete hangar floor or the drain system have not adversely impacted soil quality underlying the hangar.

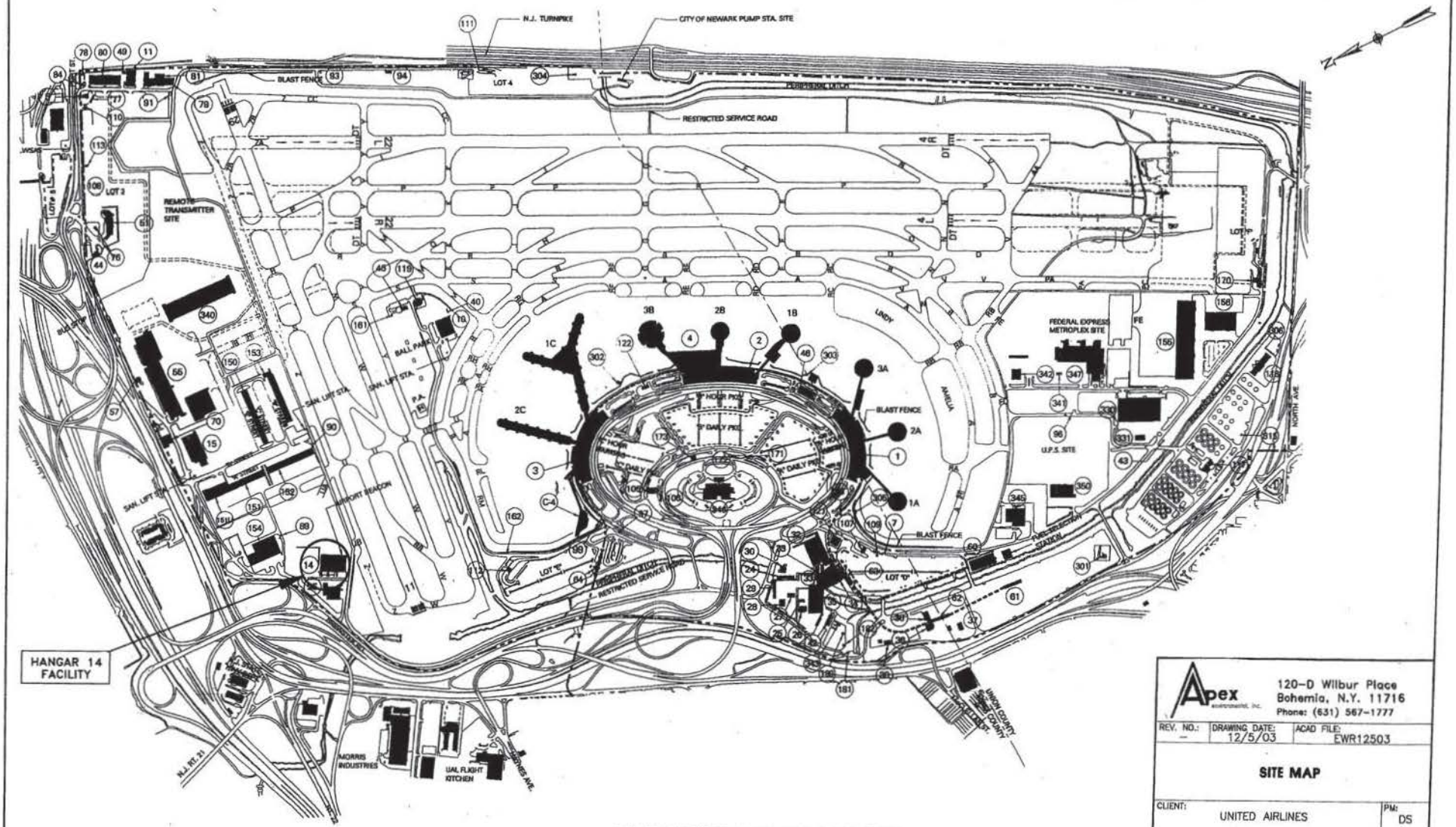
- There were two sample locations in the area of the former OWS system indicating PCBs at levels exceeding NJDEP NRDCSCCs. S-18 contained 3 ppm total VOCs at 2-3 feet bgs and 33 ppm total VOCs at 9-10 feet bgs and SB-3 contained 2.9 ppm PCB at a depth of three feet, and 7.9 ppm PCB at a depth of 8'. When this data is considered in conjunction with previous soil testing in this area by PANYNJ, it is likely that low level PCBs from the former OWS have locally impacted the soil adjacent to the former OWS system. However, the impacts are minor (well below the 50 ppm action level) and localized based upon the absence of PCBs in groundwater and the fact that most other samples were non-detectable for PCBs.

- The PCBs detected at the former OWS system were identified as Aroclor 1242 and 1254. The one deep soil sample with low level PCBs underlying the hangar (Sample S-9D with total PCBs of 0.86 ppm) was Aroclor 1268 and is believed to be associated with possible fill materials since the shallow sample immediately above the deep sample was non-detectable for PCBs and the Aroclor detected does not appear to be associated with any other PCB detections at the site.

- There were no detections of PCBs in site groundwater in the wells sampled as part of this investigation. Low level VOC and SVOC impacts were detected in upgradient wells in the area.

Due to the low concentrations detected in soils in a very limited area, and the low solubility of PCBs in water, no additional groundwater monitoring is recommended at this time. In addition, the small area near the former OWS system where NJDEP soil criteria were exceeded for PCBs should be evaluated as part of the RBDA process to determine what remedial actions, if any, should be considered.

FIGURES



THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

EWR INTERNATIONAL AIRPORT

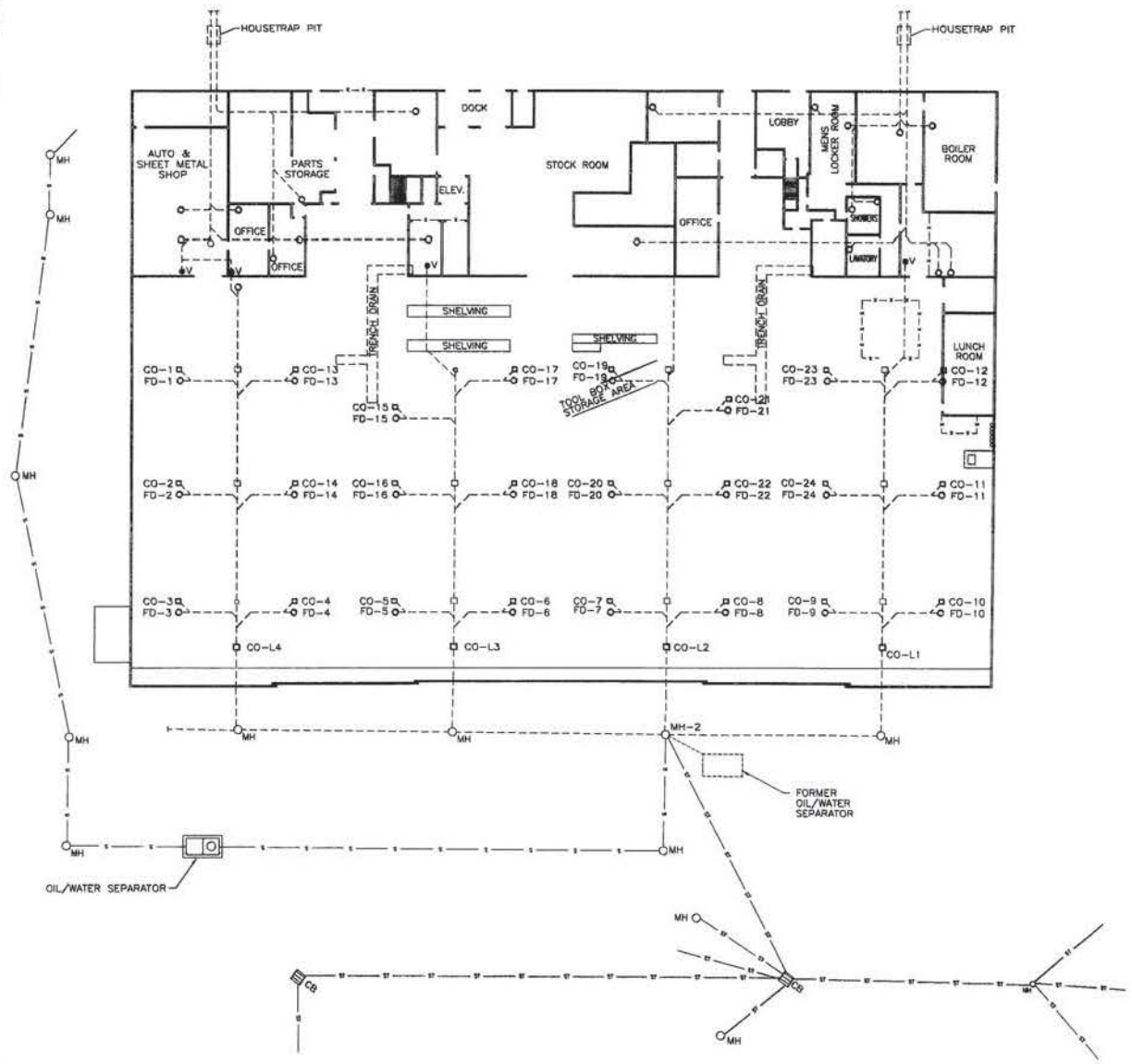
Apex Environmental, Inc.
120-D Wilbur Place
Bohemia, N.Y. 11716
Phone: (631) 567-1777

REV. NO.:	DRAWING DATE:	ACAD FILE:
—	12/5/03	EWR12503

SITE MAP

CLIENT:	PM:
UNITED AIRLINES	DS
LOCATION: EWR INTERNATIONAL AIRPORT NEWARK, NEW JERSEY	PE/RG:

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
SEE SOURCE	TS	EWR	1



LEGEND

- ●V VENT
- MH ○ MANHOLE
- CB ▤ CATCH BASIN
- FD-12 ○ FLOOR DRAIN
- CO-12 ▫ CLEAN-OUT
- ——W—— UNDERGROUND STORM WATER LINE
- ——S—— UNDERGROUND SANITARY SEWER
- - - - - - - BELOW GRADE FLOOR DRAIN LINE
- -·-·-·-·- CHAIN LINK FENCE

SOURCE: NEWARK AIRPORT
HANGAR NO. 14 STRUCTURE/PLUMBING FIRST FLOOR
THE PORT OF NEW YORK AUTHORITY
DATE: 12/20/56 REV: 7/14/60

NEWARK INTERNATIONAL AIRPORT
INSTALLATION AND PAVING PLAN – BLDG. 14
THE PORT AUTHORITY OF NY & NJ
DATE: 10/4/2002

N

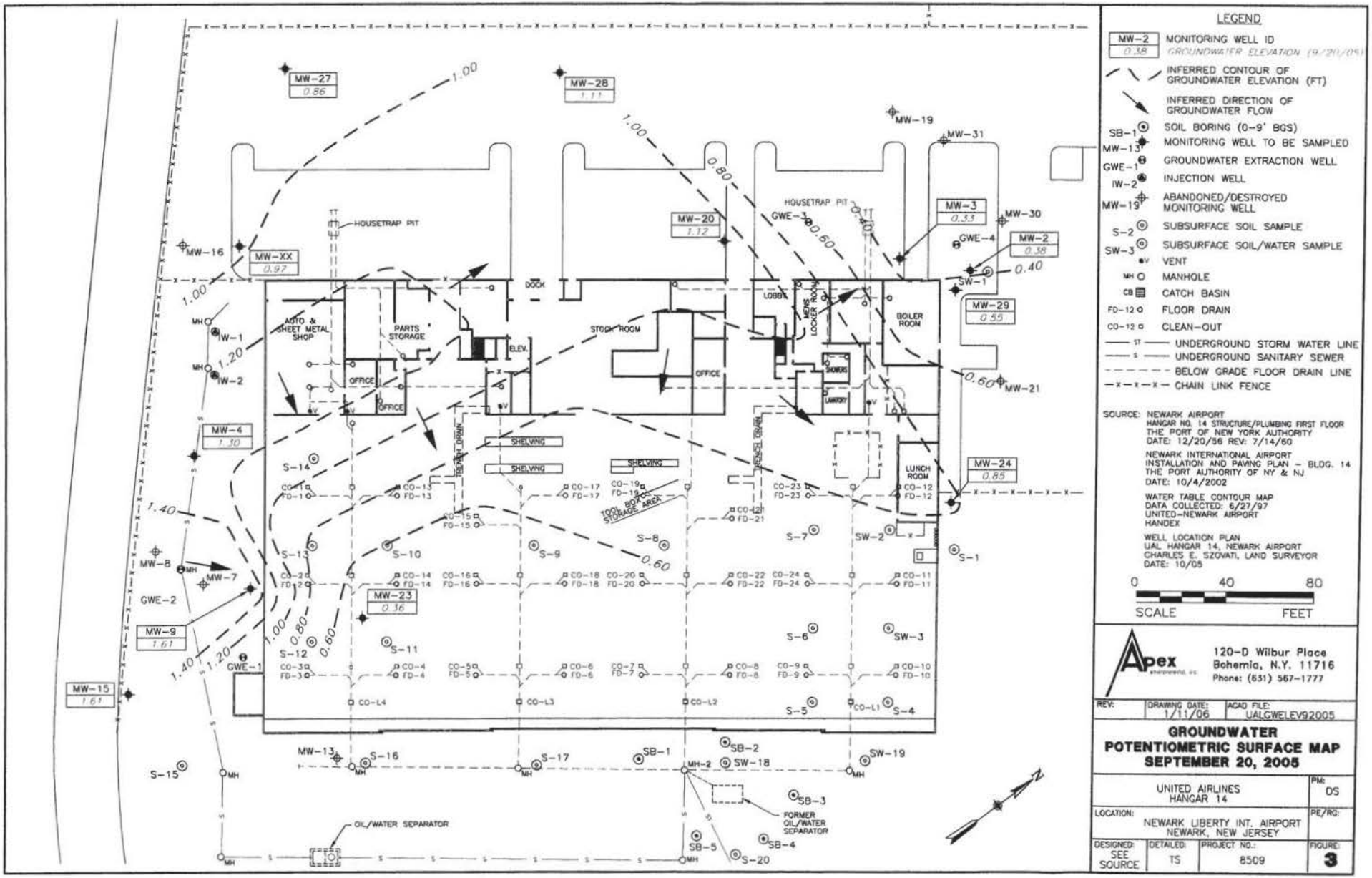
0 40 80
SCALE FEET

Apex environmental, inc.
120-D Wilbur Place
Bohemia, N.Y. 11716
Phone: (631) 567-1777

REV. NO.:	DRAWING DATE:	ACAD FILE:
–	1/9/06	HG14BLDGPLN

BUILDING PLAN

CLIENT: UNITED AIRLINES HANGAR 14			PM: DS
LOCATION: NEWARK LIBERTY INT. AIRPORT NEWARK, NEW JERSEY			PE/RG:
DESIGNED: SEE SOURCE	DETAILED: TS	PROJECT NO.: 8509	FIGURE: 2



LEGEND

- MW-2 / 0.38 — MONITORING WELL ID / GROUNDWATER ELEVATION (9/21/05)
- INFERRED CONTOUR OF GROUNDWATER ELEVATION (FT)
- INFERRED DIRECTION OF GROUNDWATER FLOW
- SB-1 — SOIL BORING (0-9' BGS)
- MW-13 — MONITORING WELL TO BE SAMPLED
- GWE-1 — GROUNDWATER EXTRACTION WELL
- IW-2 — INJECTION WELL
- MW-19 — ABANDONED/DESTROYED MONITORING WELL
- S-2 — SUBSURFACE SOIL SAMPLE
- SW-3 — SUBSURFACE SOIL/WATER SAMPLE
- V — VENT
- MH — MANHOLE
- CB — CATCH BASIN
- FD-12 — FLOOR DRAIN
- CO-12 — CLEAN-OUT
- ST — UNDERGROUND STORM WATER LINE
- S — UNDERGROUND SANITARY SEWER
- BELOW GRADE FLOOR DRAIN LINE
- CHAIN LINK FENCE

SOURCE: NEWARK AIRPORT
HANGAR NO. 14 STRUCTURE/PLUMBING FIRST FLOOR
THE PORT OF NEW YORK AUTHORITY
DATE: 12/20/56 REV: 7/14/60

NEWARK INTERNATIONAL AIRPORT
INSTALLATION AND PAVING PLAN - BLDG. 14
THE PORT AUTHORITY OF NY & NJ
DATE: 10/4/2002

WATER TABLE CONTOUR MAP
DATA COLLECTED: 6/27/97
UNITED-NEWARK AIRPORT
HANDEX

WELL LOCATION PLAN
UAL HANGAR 14, NEWARK AIRPORT
CHARLES E. SZOVATI, LAND SURVEYOR
DATE: 10/05

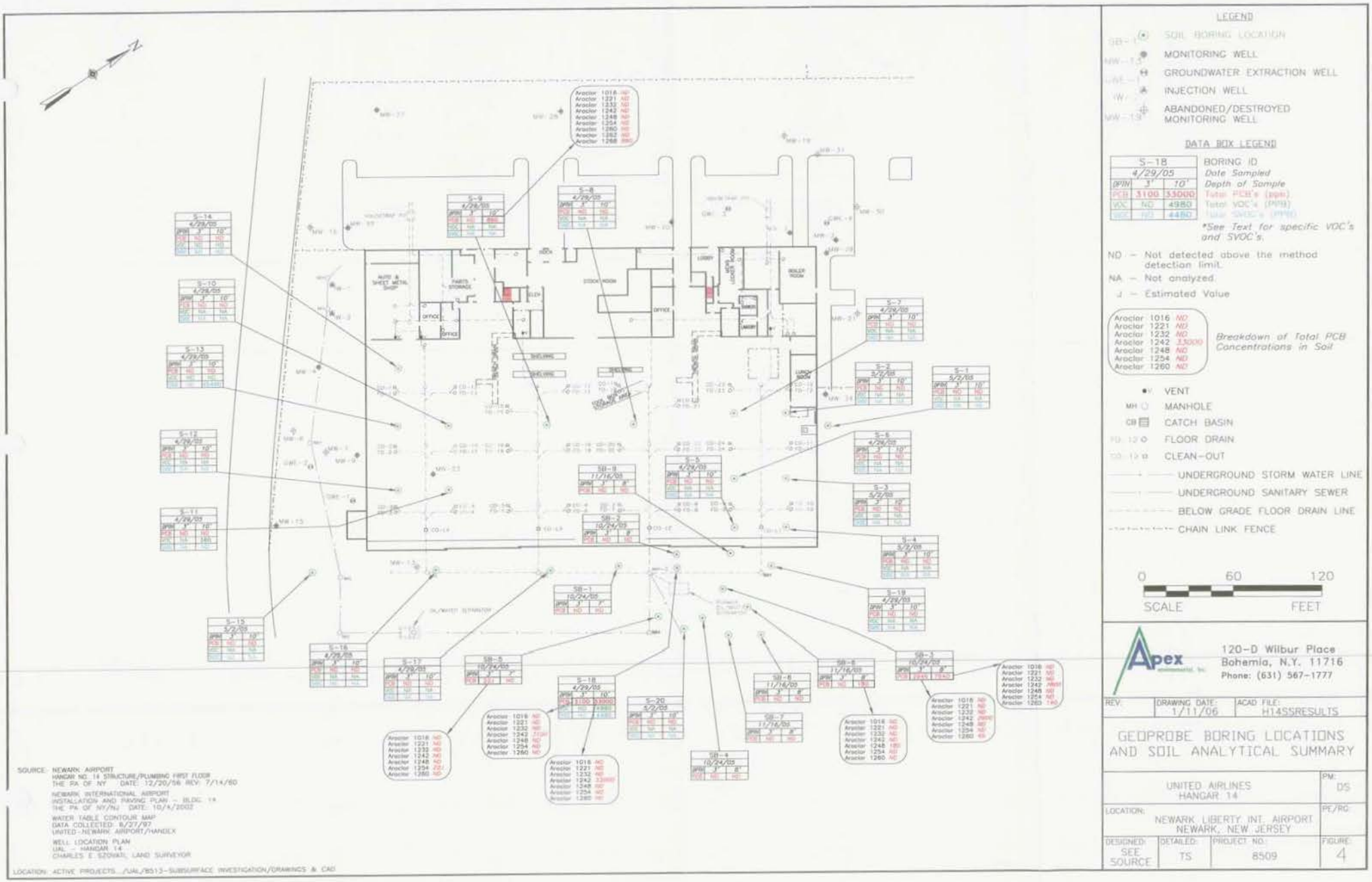
0 40 80
SCALE FEET

Apex environmental, inc.
120-D Wilbur Place
Bohemia, N.Y. 11716
Phone: (631) 567-1777

REV:	DRAWING DATE:	ACAD FILE:
	1/11/06	UALGWELEV92005

GROUNDWATER POTENTIOMETRIC SURFACE MAP SEPTEMBER 20, 2005

UNITED AIRLINES HANGAR 14			PM: DS
LOCATION: NEWARK LIBERTY INT. AIRPORT NEWARK, NEW JERSEY			PE/RG:
DESIGNED: SEE SOURCE	DETAILED: TS	PROJECT NO.: 8509	FIGURE: 3



SOURCE: NEWARK AIRPORT
HANGAR NO. 14 STRUCTURE/PLUMBING FIRST FLOOR
THE PA OF NY DATE: 12/20/56 REV: 7/14/60

NEWARK INTERNATIONAL AIRPORT
INSTALLATION AND PAVING PLAN – BLDG. 14
THE PA OF NY/NJ DATE: 10/4/2002

WATER TABLE CONTOUR MAP
DATA COLLECTED: 8/27/97
UNITED - NEWARK AIRPORT/HANGEX

WELL LOCATION PLAN
UAL – HANGAR 14
CHARLES E. SZOVAR, LAND SURVEYOR

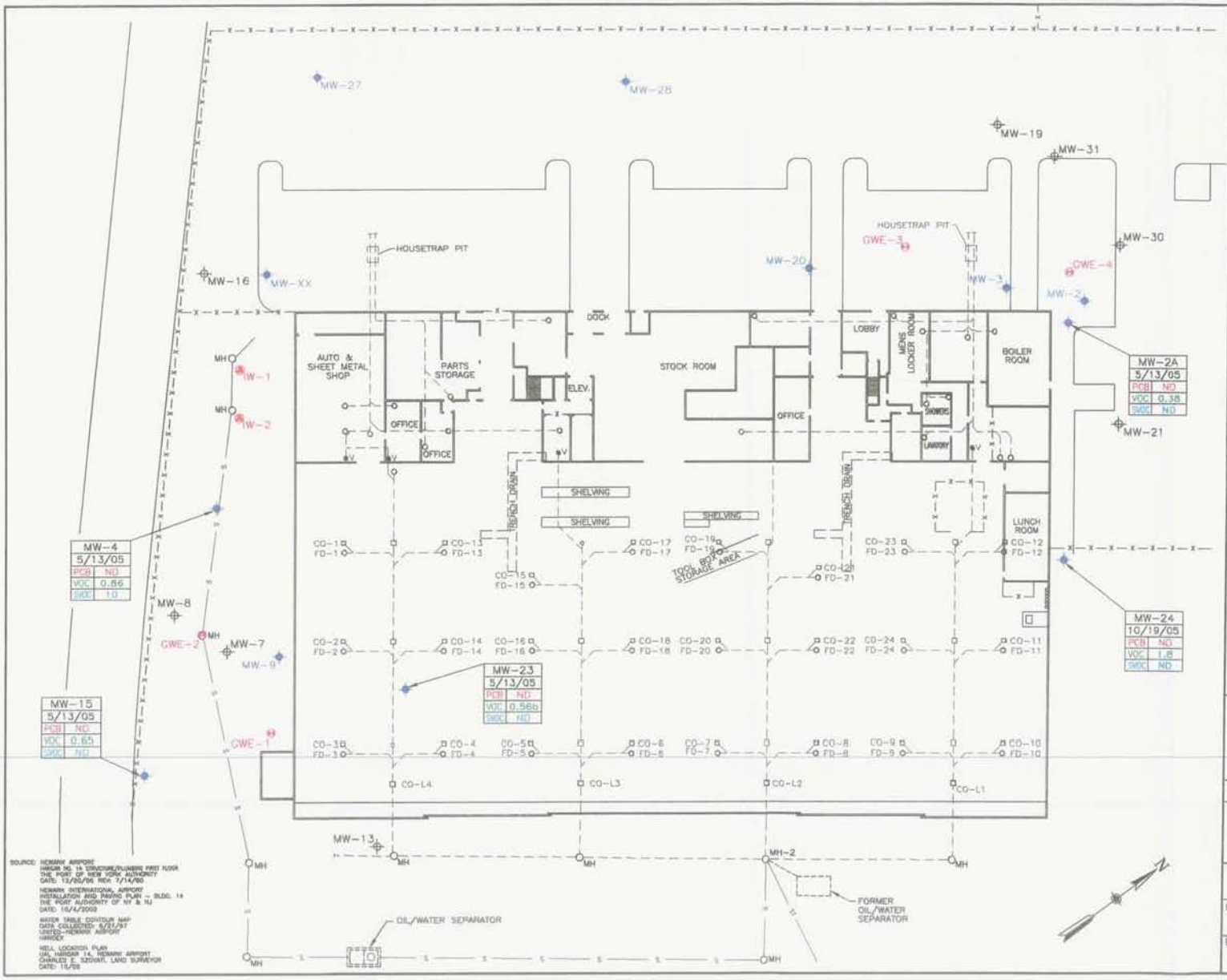
LOCATION: ACTIVE PROJECTS.../UAL/8513-SUBSURFACE INVESTIGATION/DRAWINGS & CAD

Apex Companies, Inc.
120-D Wilbur Place
Bohemia, N.Y. 11716
Phone: (631) 567-1777

REV:	DRAWING DATE: 1/11/06	ACAD FILE: H14SSRESULTS

GEOPROBE BORING LOCATIONS AND SOIL ANALYTICAL SUMMARY

			PM:
UNITED AIRLINES HANGAR 14			DS
LOCATION: NEWARK LIBERTY INT. AIRPORT NEWARK, NEW JERSEY			PE/RG:
DESIGNED: SEE SOURCE	DETAILED: TS	PROJECT NO.: 8509	FIGURE: 4



SOURCE: NEWARK AIRPORT
HANGAR NO. 14 STRUCTURE/PLUMBING FIRST FLOOR
THE PORT OF NEW YORK AUTHORITY
DATE: 12/20/96 REV: 7/14/00

NEWARK INTERNATIONAL AIRPORT
INSTALLATION AND PAVING PLAN - BLDG. 14
THE PORT AUTHORITY OF NY & NJ
DATE: 10/4/2002

WATER TABLE CONTOUR MAP
DATA COLLECTED: 6/21/01
UNITED-NEWARK AIRPORT
HANGER

WELL LOCATION PLAN
UAL HANGAR 14, NEWARK AIRPORT
CHARLES E. SZOVATI, LAND SURVEYOR
DATE: 10/06

LEGEND

- MW-1 — MONITORING WELL
- GWE-1 — GROUNDWATER EXTRACTION WELL
- IW-2 — INJECTION WELL
- MW-19 — ABANDONED/DESTROYED MONITORING WELL
- V — VENT
- MH — MANHOLE
- CB — CATCH BASIN
- FD-12 — FLOOR DRAIN
- CO-12 — CLEAN-OUT
- ST — UNDERGROUND STORM WATER LINE
- S — UNDERGROUND SANITARY SEWER
- BELOW GRADE FLOOR DRAIN LINE
- CHAIN LINK FENCE

DATA BOX LEGEND

MW-2	WELL ID
5/13/05	Date Sampled
PCB ND	PCB (ppb)
VOC 0.38	Total VOC's (PPB)
SVOC 2	Total SVOC's (PPB)

** See Text for specific VOC's and SVOC's.*

ND – Not detected above the method detection limit.
NA – Not analyzed.
b – Compound detected in method blank.

0 40 80
SCALE FEET

Apex environmental, inc.
120-D Wilbur Place
Bohemia, N.Y. 11716
Phone: (631) 567-1777

REV:	DRAWING DATE:	ACAD FILE:
	1/11/06	H14MWGWANL

MONITORING WELLS AND GROUNDWATER ANALYTICAL SUMMARY

UNITED AIRLINES HANGAR 14		PM: DS
LOCATION: NEWARK LIBERTY INT. AIRPORT NEWARK, NEW JERSEY		PE/RG:
DESIGNED: SEE SOURCE	DETAILED: TS	PROJECT NO.: 8513.001
		FIGURE: 5

TABLES

Table 1

United Airlines, Inc.

Soil Gas Screening Results

DATA								
Boring No.	Sample Order	Time	Date	DTW ft.	Sample 1 depth/ft.	PID ppm	Sample 2 depth/ft.	PID ppm
1	20	1:45	2-May	~ 10'	~3'	0	~9'	0
2	17	11:30	2-May	~ 10'	~3'	0	~9'	0
3	18	11:45	2-May	~ 10'	~3'	0	~9'	0
4	19	11:50	2-May	~ 10'	~3'	0	~9'	0
5	10	12:00	29-Apr	~ 10'	~3'	0	~9'	0
6	9	11:30	29-Apr	~ 10'	~3'	0	~9'	0
7	8	10:40	29-Apr	~ 10'	~3'	0	~9'	6.8
8	7	10:20	29-Apr	~ 10'	~3'	0	~9'	0
9	6	10:15	29-Apr	~ 10'	~3'	0	~9'	0
10	5	10:00	29-Apr	~ 10'	~3'	16.5	~9'	0
11	4	9:40	29-Apr	~ 10'	~3'	18.5	~9'	0
12	3	9:30	29-Apr	~ 10'	~3'	197	~9'	1,328
13	1	8:30	29-Apr	~ 10'	~3'	8.8	~9'	3.8
14	2	9:10	29-Apr	~ 10'	~3'	16.4	~9'	0
15	16	10:00	2-May	~ 10'	~3'	0	~9'	64
16	14	2:15	29-Apr	~ 10'	~3'	0	~9'	0
17	13	2:00	29-Apr	~ 10'	~3'	0	~9'	0
18	12	1:30	29-Apr	~ 10'	~3'	58	~9'	384
19	11	1:00	29-Apr	~ 10'	~3'	0	~9'	0
20	15	9:30	2-May	~ 10'	~3'	0	~9'	0

Table 2

United Airlines, Inc.

Groundwater Elevation Gauging Results

	10/19/2005 survey Top of Inner Casing	10/19/2005 survey Top of outer Casing	9/20/2005 DTW	9/20/2005 G W elev.
MW 2	11.56	11.79	11.18	0.38
MW 3	12.7	13.87	12.37	0.33
MW 4	10.22	10.71	8.92	1.3
MW 9	11.67	12.12	10.06	1.61
MW 15	10.57	10.99	8.96	1.61
MW 20	10.93	11.07	9.81	1.12
MW 23	11.14	11.38	10.78	0.36
MW 24	11.18	11.64	10.33	0.85
MW 27	10.57	10.87	9.71	0.86
MW 28	10.31	10.62	9.2	1.11
MW 29	11.32	11.62	10.77	0.55
MW XX	10.96	11.22	9.99	0.97

Table 3
United Airlines, Inc.
Soil Analytical Results Summary - PCBs

Parameter	NJDEP NRDCSCC	S1 3 ft bgs		S1D 10 ft bgs		S2 3 ft bgs		S2D 10 ft bgs		S3 3 ft bgs		S3D 10 ft bgs		S4 3 ft bgs		S4D 10 ft bgs		S5 3 ft bgs		S5D 10 ft bgs	
Aroclor 1016	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1221	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1232	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1242	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1248	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1254	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1260	NA	<0.035	U	<0.038	U	<0.034	U	<1.600	U	<0.034	U	<0.940	U	<0.034	U	<0.036	U	<0.034	U	<0.950	U
Aroclor 1262	NA	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U
Aroclor 1268	NA	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U	**	U
Total PCBs	2	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	

Parameter	NJDEP NRDCSCC	S6 3 ft bgs		S6D 10 ft bgs		S7 3 ft bgs		S7D 10 ft bgs		S8 3 ft bgs		S8D 10 ft bgs		S9 3 ft bgs		S9D 10 ft bgs		S10 3 ft bgs		S10D 10 ft bgs	
Aroclor 1016	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1221	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1232	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1242	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1248	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1254	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1260	NA	<0.035	U	<0.930	U	<0.067	U	<0.680	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	<0.034	U	<1.000	U
Aroclor 1262	NA	**	U	**	U	**	U	**	U	<0.034	U	<0.048	U	<0.034	U	<0.061	U	**	U	**	U
Aroclor 1268	NA	**	U	**	U	**	U	**	U	<0.034	U	<0.048	U	<0.034	U	***0.860***		**	U	**	U
Total PCBs	2	0.000		0.000		0.000		0.000		0.000		0.000		0.000		***0.860***		0.000		0.000	

Table 3
United Airlines, Inc.
Soil Analytical Results Summary - PCBs

Parameter	NJDEP NRDCSCC	S11 3 ft bgs	S11D 10 ft bgs	S12 3 ft bgs	S12D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S15 3 ft bgs	S15D 10 ft bgs
Aroclor 1016	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1221	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1232	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1242	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1248	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1254	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1260	NA	<0.034 U	<0.890 U	<0.034 U	<0.044 U	<0.034 U	<0.046 U	<0.034 U	<0.052 U	<0.046 U	<0.041 U
Aroclor 1262	NA	** U	** U	** U	<0.044 U	** U	** U	** U	<0.052 U	** U	** U
Aroclor 1268	NA	** U	** U	** U	<0.044 U	** U	** U	** U	<0.052 U	** U	** U
Total PCBs	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Parameter	NJDEP NRDCSCC	S16 3 ft bgs	S16D 10 ft bgs	S17 3 ft bgs	S17D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs	S19 3 ft bgs	S19D 10 ft bgs	S20 3 ft bgs	S20D 10 ft bgs
Aroclor 1016	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1221	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1232	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1242	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	*3.100*	*33.000*	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1248	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1254	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1260	NA	<0.044 U	<1.500 U	<0.035 U	<1.000 U	<0.360 U	<3.600 U	<0.036 U	<0.850 U	<0.037 U	<0.052 U
Aroclor 1262	NA	** U	** U	** U	** U	** U	** U	** U	** U	** U	** U
Aroclor 1268	NA	** U	** U	** U	** U	** U	** U	** U	** U	** U	** U
Total PCBs	2	0.000	0.000	0.000	0.000	*3.100*	*33.000*	0.000	0.000	0.000	0.000

Notes:

All results in mg/kg (ppm) unless noted.

Table 3
United Airlines, Inc.
Soil Analytical Results Summary - PCBs

Samples collected May 2005

NA = Not Available

D = Compound is identified at a secondary dilution factor.

N = presumptive evidence of a compound, only applicable to TICs.

<### U = Non-Detectable above the method detection limit

** = No indication of possible detection in original lab analyses. Aroclor 1262 and 1268 were only run on samples where original lab results indicated possible presence of these compounds.

Table 4
United Airlines, Inc.
Soil Analytical Results Summary - VOCs

Parameter	NJDEP RDCSCC*	NJDEP NRDCSCC**	NJDEP IGWSCC***	S11 3 ft bgs	S11D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs
Dichlorodifluoromethane	NA	NA	NA	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Chloromethane	520,000	1,000,000	10,000	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Vinyl Chloride	NA	NA	NA	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Bromomethane	79,000	1,000,000	1,000	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Chloroethane	NA	NA	NA	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Trichlorofluoromethane	NA	NA	NA	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
1,1-Dichloroethene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Acetone	1,000,000	1,000,000	100,000	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Carbon Disulfide	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Methylene Chloride	49,000	210,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
trans-1,2-Dichloroethene	1,000,000	1,000,000	50,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
MTBE	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1-Dichloroethane	570,000	1,000,000	10,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
2,2-Dichloropropane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
cis-1,2-Dichloroethene	79,000	1,000,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
2-Butanone	1,000,000	1,000,000	50,000	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Bromochloromethane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Chloroform	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1,1-Trichloroethane	210,000	1,000,000	50,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Carbon Tetrachloride	2,000	4,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1-Dichloropropene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Benzene	3,000	13,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2-Dichloroethane	6,000	24,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Trichloroethene	23,000	54,000	1,000	<250 U	***360***	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2-Dichloropropane	10,000	43,000	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Dibromomethane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Bromodichloromethane	11,000	46,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
cis 1,3-Dichloropropene	4,000	5,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
4-Methyl-2-pentanone	1,000,000	1,000,000	50,000	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U
Toluene	1,000,000	1,000,000	500,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
trans 1,3-Dichloropropene	4,000	5,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1,2-Trichloroethane	22,000	420,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Tetrachloroethene	4,000	6,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,3-Dichloropropane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
2-Hexanone	NA	NA	NA	<510 U	<670 U	<510 U	<680 U	<510 U	<970 U	<530 U	<580 U

Table 4
United Airlines, Inc.
Soil Analytical Results Summary - VOCs

Parameter	NJDEP RDCSCC*	NJDEP NRDCSCC**	NJDEP IGWSCC***	S11 3 ft bgs	S11D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs
Dibromochloromethane	110,000	1,000,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1.2-Dibromoethane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Chlorobenzene	37,000	680,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1,2,2-Tetrachloroethane	170,000	310,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Ethylbenzene	1,000,000	1,000,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
m/p-Xylene	410,000	1,000,000	67,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
o-Xylene	410,000	1,000,000	67,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Styrene	23,000	97,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Bromoform	86,000	370,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Isopropylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	***140 J***
Bromobenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,1,2,2-Tetrachloroethane	34,000	70,000	1,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2,3-Trichloropropane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
n-Propylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
trans-1,4-Dichloro-2-butene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
2-Chlorotoluene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
4-Chlorotoluene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,3,5-Trimethylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	***140 J***
tert-Butylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2,4-Trimethylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
sec-Butylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	***1,600***
1,3-Dichlorobenzene	5,100,000	10,000,000	50,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
4-Isopropyltoluene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,4-Dichlorobenzene	570,000	1,000,000	10,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2-Dichlorobenzene	5,100,000	10,000,000	50,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
n-Butylbenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	***3,100***
Hexachloroethane	6,000	100,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,3-Dibromo-3-chloropropane	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Hexachlorobutadiene	1,000	21,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Naphthalene	230,000	4,200,000	100,000	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
1,2,3-Trichlorobenzene	NA	NA	NA	<250 U	<330 U	<250 U	<340 U	<260 U	<490 U	<270 U	<290 U
Total VOCs	NA	1,000,000	NA	0	***360***	0	0	0	0	0	***4,980***

Notes:

Table 4
United Airlines, Inc.
Soil Analytical Results Summary - VOCs

Parameter	NJDEP RDCSCC*	NJDEP NRDCSCC**	NJDEP IGWSCC***	S11 3 ft bgs	S11D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs

All results in ug/kg (ppb) unless otherwise indicated.

NA = Not Available

J = Estimated value

B = Analyte is found in associated blank as well as in the sample

E = Compound whose concentrations exceeded the calibration range of the GC/MS for that specific analysis. The sample was diluted and re-analyzed.

D = Compound is identified at a secondary dilution factor.

<### U = Compound was analyzed for but not detected. The ## represents the sample quantitation limit (This is similar to the U flag).

*RDCSCC = NJDEP Residential Direct Contact Soil Cleanup Criteria

** NRDCSCC = NJDEP Non-Residential Direct Contact Soil Cleanup Criteria

*** IGWSCC = NJDEP Impact to Groundwater Soil Cleanup Criteria

Table 5
United Airlines, Inc.
Soil Analytical Results Summary - SVOCs

Parameter	NJDEP RDCSCC*	NJDEP NRDCSCC**	NJDEP IGWSCC***	S11 3 ft bgs	S11D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs
N-nitrosodimethylamine	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<340 U	<750 U
Phenol	10,000,000	10,000,000	50,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<340 U	<750 U
bis(2-Chloroethyl)ether	660	3,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<340 U	<750 U
2-Chlorophenol	280,000	5,200,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
1,3-Dichlorobenzene	5,100,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
1,4-Dichlorobenzene	570,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
1,2-Dichlorobenzene	5,100,000	10,000,000	50,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
bis(2-Chlroisopropyl)ether	2,300,000	10,000,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
N-Nitroso-Di-n-propylamine	660	660	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Hexachloroethane	6,000	100,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Nitrobenzene	28,000	520,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Isophorone	1,100,000	10,000,000	50,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
2-Nitrophenol	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
2,4-Dimethylphenol	1,100,000	10,000,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
bis(2-Chloroethoxy)methane	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
2,4-Dichlorophenol	170,000	3,100,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Naphthalene	230,000	4,200,000	100,000	<340 U	***450 J***	<340 U	***390 J***	<340 U	<2,600 U	<710 U	<750 U
Hexachlorobutadiene	1,000	21,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
4-Chloro-3-methylphenol	10,000,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Hexachlorocyclopentadiene	400,000	7,300,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
2,4,6-Trichlorophenol	62,000	270,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
2-Chloronaphthalene	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Dimethylphthalate	10,000,000	10,000,000	50,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Acenaphthene	3,400,000	10,000,000	100,000	<340 U	<890 U	<340 U	***700 J***	<340 U	<2,600 U	<710 U	<750 U
2,4-Dinitrophenol	110,000	2,100,000	10,000	<840 U	<2200 U	<840 U	<2,300 U	<850 U	<6,500 U	<1,800 U	<1,900 U
4-Nitrophenol	NA	NA	NA	<840 U	<2200 U	<840 U	<2,300 U	<850 U	<6,500 U	<1,800 U	<1,900 U
2,4-Dinitrotoluene	1,000	4,000	10,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Diethylphthalate	10,000,000	10,000,000	50,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Fluorene	2,300,000	10,000,000	100,000	<340 U	<890 U	<340 U	***1,600***	<340 U	<2,600 U	<710 U	<750 U
4-Chlorophenyl-phenylether	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
4,6-Dinitro-2-methylphenol	NA	NA	NA	<840 U	<2200 U	<840 U	<2,300 U	<850 U	<6,500 U	<1,800 U	<1,900 U
N-Nitrosodiphenylamine	140,000	600,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
1,2-diphenylhydrazine (as zo)	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
4-Bromophenyl-phenylether	NA	NA	NA	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U

Table 5
United Airlines, Inc.
Soil Analytical Results Summary - SVOCs

Parameter	NJDEP RDCSCC*	NJDEP NRDCSCC**	NJDEP IGWSCC***	S11 3 ft bgs	S11D 10 ft bgs	S13 3 ft bgs	S13D 10 ft bgs	S14 3 ft bgs	S14D 10 ft bgs	S18 3 ft bgs	S18D 10 ft bgs
Hexachlorobenzene	660	2,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Pentachlorophenol	6,000	24,000	100,000	<840 U	<2200 U	<840 U	<2200 U	<850 U	<6,500 U	<1,800 U	<1,900 U
Phenanthrene	NA	NA	NA	<340 U	<890 U	<340 U	***9,000***	<340 U	<2,600 U	<710 U	***1,000***
Anthracene	10,000,000	10,000,000	100,000	<340 U	<890 U	<340 U	***1,900***	<340 U	<2,600 U	<710 U	<750 U
Di-n-butylphthalate	5,700,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	***430 J***
Fluoranthene	2,300,000	10,000,000	100,000	<340 U	***360 J***	<340 U	***9,000***	<340 U	***1,300 J***	<710 U	***1,000***
Benzidine	NA	NA	NA	<1,700 U	<4,500 U	<1,700 U	<4,600 U	<1,700 U	<13,000 U	<3,600 U	<3,800 U
Pyrene	1,700,000	10,000,000	100,000	<340 U	***400 J***	<340 U	***6,400***	<340 U	***1,200***	<710 U	***780***
Butylbenzylphthalate	1,100,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<340 U
Benzo[a]anthracene	900	4,000	500,000	<340 U	***310 J***	<340 U	***3,400***	<340 U	<2,600 U	<710 U	***300 J***
3,3'-Dichlorobenzidine	2,000	6,000	100,000	<670 U	<1,800 U	<670 U	<1,800 U	<680 U	<5,200 U	<1,400 U	<1,500 U
Chrysene	9,000	40,000	500,000	<340 U	***360 J***	<340 U	***3,400***	<340 U	<2,600 U	<710 U	***320 J***
bis(2-Ethylhexyl)phthalate	49,000	210,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	***1,700***
Di-n-octylphthalate	1,100,000	10,000,000	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	***610 J***
Benzo[b]fluoranthene	900	4,000	50,000	<340 U	***460 J***	<340 U	***3,100***	<340 U	***970***	<710 U	***270 J***
Benzo[k]fluoranthene	900	4,000	500,000	<340 U	<890 U	<340 U	***1,200***	<340 U	<2,600 U	<710 U	<750 U
Benzo[a]pyrene	660	660	100,000	<340 U	***340 J***	<340 U	***2,900***	<340 U	<2,600 U	<710 U	<750 U
Indeno[1,2,3-cd]pyrene	900	4,000	500,000	<340 U	***320 J***	<340 U	***1,900***	<340 U	<2,600 U	<710 U	<750 U
Dibenz[a,h]anthracene	660	660	100,000	<340 U	<890 U	<340 U	<910 U	<340 U	<2,600 U	<710 U	<750 U
Benzo[g,h,i]perylene	NA	NA	NA	<340 U	***350 J***	<340 U	***1,600***	<340 U	<2,600 U	<710 U	<750 U
Total SVOCs	10,000,000	10,000,000	10,000,000	0	***3,350***	0	***46,490***	0	***3,470***	0	***6,410***

Notes:

All results in ug/kg (ppb) unless otherwise indicated.

NA = Not Available

J = Estimated value

B = Analyte is found in associated blank as well as in the sample

E = Compound whose concentrations exceeded the calibration range of the GC/MS for that specific analysis. The sample was diluted and re-analyzed.

D = Compound is identified at a secondary dilution factor.

<### U = Compound was analyzed for but not detected. The ## represents the sample quantitation limit (This is similar to the U flag).

*RDCSCC = NJDEP Residential Direct Contact Soil Cleanup Criteria

** NRDCSCC = NJDEP Non-Residential Direct Contact Soil Cleanup Criteria

*** IGWSCC = NJDEP Impact to Groundwater Soil Cleanup Criteria

Table 6
United Airlines, Inc.
Groundwater Analytical Results Summary - PCBs

Parameter	NJDEP GW QC	MW-2A	MW-4	MW-15	MW-23	MW-24
Aroclor 1016	NA	<0.48 U	<0.48 U	<0.48 U	<0.48 U	21 U
Aroclor 1221	NA	<0.47 U	<0.47 U	<0.47 U	<0.47 U	21 U
Aroclor 1232	NA	<0.39 U	<0.39 U	<0.39 U	<0.39 U	21 U
Aroclor 1242	NA	<0.14 U	<0.14 U	<0.14 U	<0.14 U	21 U
Aroclor 1248	NA	<0.21 U	<0.21 U	<0.21 U	<0.21 U	21 U
Aroclor 1254	NA	<0.16 U	<0.16 U	<0.16 U	<0.16 U	21 U
Aroclor 1260	NA	<0.45 U	<0.45 U	<0.45 U	<0.45 U	21 U
Total PCBs	0.00	0.000	0.000	0.000	0.000	0.000

Notes:

All results in ug/l (ppm) unless noted.

Samples collected May 2005

NA = Not Available

D = Compound is identified at a secondary dilution factor.

N = presumptive evidence of a compound, only applicable to TICs.

U = Non-Detectable above the method detection limit

GW QC = NJDEP Groundwater Qualirt Criteria

APPENDIX A

SOIL BORING LOGS

LAND, AIR, WATER
ENVIRONMENTAL SERVICES, INC.

32 CHICHESTER AVE. PO BOX 372 CENTER MORICHES, NY 11934 (631) 874-2112 FAX (631) 874-4547

GEOPROBE LOGS

United Airlines Hanger 14
42-73 Brewster Rd.
Newark, NY

April through May 2005

GEOPROBE LOGS

BORING#: S-5

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		3" Asphalt and concrete core
1 ft	5 ft	41 inches	4" Dark grey/grey sand fill, fine
5 ft	10 ft	56 inches	Grey/brown/black sand/glass/metal/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: S-6

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	39 inches	7" Dark grey/grey sand fill, fine
5 ft	10 ft	49 inches	Grey/black sand/fill/glass/plastic, fine, wet at tip

GEOPROBE LOGS

BORING#: S-7

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	35 inches	5" Dark grey/grey sand/fill, fine
5 ft	10 ft	55 inches	Grey/brown/black sand/wood/glass/metal, fine, wet at tip

GEOPROBE LOGS

BORING#: S-8

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	46 inches	3" Dark grey/grey sand, fine
5 ft	10 ft	53 inches	Grey/brown/black sand/fill/wood/glass/metal, fine, wet at tip

GEOPROBE LOGS

BORING#: S-9

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	40 inches	5" Dark grey/grey sand/fill, fine
5 ft	10 ft	56 inches	Grey/black sand/wood/metal/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: S-10

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	39 inches	4" Dark grey/grey sand/fill, fine
5 ft	10 ft	56 inches	Grey/black sand/wood/metal/fill, fine, wet

GEOPROBE LOGS

BORING#: S-11

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	37 inches	6" Dark grey/grey sand fill, fine
5 ft	10 ft	50 inches	Grey/brown/black sand//wood/glass/metal/fill, fine, wet

GEOPROBE LOGS

BORING#: S-12

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	38 inches	3" Dark grey/grey sand fill, fine
5 ft	10 ft	49 inches	Grey/black sand/fill/glass/wood, fine, wet at tip

GEOPROBE LOGS

BORING#: S-13

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	44 inches	Dark grey/grey sand/fill, fine
5 ft	10 ft	55 inches	Grey sand/wood/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: S-14

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	40 inches	4" Dark grey/grey sand, fine
5 ft	10 ft	58 inches	Grey/black sand/fill/wood/glass, fine, wet at tip

GEOPROBE LOGS

BORING#: SW-16

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete core
1 ft	5 ft	42 inches	Dark grey/grey sand/glass/wood/fill, fine
5 ft	10 ft	43 inches	Grey/black sand/wood/glass/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: SW-17

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 9.5 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		14" Asphalt Core
1 ft	5 ft	37 inches	12" Dark gre/grey sand/fill, fine
5 ft	10 ft	40 inches	Grey/black and/glass/metal/fill, fine, wet

GEOPROBE LOGS

BORING#: SW-18

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	2 ft		2' Asphalt Core
2 ft	5 ft	30 inches	3" Dark grey/grey sand/fill, fine
5 ft	10 ft	49 inches	Grey/red sand/wood/glass/fill, fine, wet at tip, high fuel odor

GEOPROBE LOGS

BORING#: SW-19

DATE: April 29, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 15 feet
SAMPLING METHOD: 5' Macro & SP15 Water Sampler

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Asphalt
1 ft	5 ft	37 inches	Dark grey/grey sand/fill, fine
5 ft	10 ft	46 inches	Grey/red sand/glass/wood/fill, fine, wet
10 ft	15 ft		No soil sample, water sample attempted but not collected

GEOPROBE LOGS

BORING#: S-1

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 9.5 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM		TO		RECOVERY	SAMPLE DESCRIPTION
0	ft	6	in		Concrete Sidewalk
6	in	5	ft	48 inches	Tan sand brick fill, fine, wet
5	ft	10	ft	38 inches	Tan sand, fine, wet, (SM)

GEOPROBE LOGS

BORING#: S-2

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete Core
1 ft	5 ft	44 inches	1" Dark grey/grey sand fill, fine
5 ft	10 ft	50 inches	25" Grey/brown/black sand/wood/metal/fill, fine, wet

GEOPROBE LOGS

BORING#: S-3

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Concrete Core
1 ft	5 ft	43 inches	2" Dark grey/grey sand fill, fine
5 ft	10 ft	55 inches	Grey/redish brown/black sand/wood/fill, fine, wet

GEOPROBE LOGS

BORING#: S-4

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1.5 ft		Concrete Core
1.5 ft	5 ft	28 inches	5" dark grey/grey sand/fill, fine
5 ft	10 ft	58 inches	42" Grey/15" red/1" black sand/wood/glass/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: S-15

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Asphalt Core
1 ft	5 ft	40 inches	2" Dark grey/grey sand/fill, fine
5 ft	10 ft	42 inches	20" Grey/black sand/wood/carpet/fill, fine, wet at tip

GEOPROBE LOGS

BORING#: SW-20

DATE: May 2, 2005
SITE: United Airlines Hanger 14
Newark, NJ

CONSULTANT: APEX Environmental, Inc.
Patchogue, NY

DEPTH DRILLED: 10 feet
SAMPLING METHOD: 5' Macro & SP 15 Water Sample

DEPTH TO WATER: 10 feet

DRILLER: E. Santiago

HELPER: K. McGourty

DEPTH FROM	DEPTH TO	RECOVERY	SAMPLE DESCRIPTION
0 ft	1 ft		Asphalt Core
1 ft	5 ft	42 inches	4" Dark grey/10" grey to red sand/fill, fine
5 ft	10 ft	49 inches	Red/grey/black sand/wood/glass/fill, fine, wet at tip
10 ft	15 ft		No soil sample, water sample attempted but not collected

APPENDIX B

MONITORING WELL SURVEY

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark -- Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#2

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'37.9" Latitude: North 40°42'18.7"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,960 East 581,620

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.56

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Charles E Szovati
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

11/10/05
DATE

Charles E. Szovati, New Jersey License No. GS-35887
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

c/o Millennium Surveying & Engineering, Inc.
199 North Woodbury Road
Pitman, New Jersey 08071
PH: (856) 256-8983

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#3

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'38.1" Latitude: North 40°42'18.4"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,930 East 581,600

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 12.70

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#4

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'39.0" Latitude: North 40°42'15.2"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,610 East 581,540

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.22

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#9

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'38.1" Latitude: North 40°42'15.2"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,610 East 581,600

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.67

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

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MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#15

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'37.9" Latitude: North 40°42'14.5"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,540 East 581,620

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.57

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty International Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#20

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'38.7" Latitude: North 40°42'17.8"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,870 East 581,590

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.93

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

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Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#23

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'37.7" Latitude: North 40°42'15.6"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,650 East 581,630

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.14

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

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_____ 11/10/05
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Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#24

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'36.7" Latitude: North 40°42'18.1"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,900 East 581,710

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.18

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#27

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'40.7" Latitude: North 40°42'16.4"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,730 East 581,400

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.57

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Charles E. Szovati 11/10/05

PROFESSIONAL LAND SURVEYOR'S SIGNATURE DATE

Charles E. Szovati, New Jersey License No. GS-35887
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

c/o Millennium Surveying & Engineering, Inc.
199 North Woodbury Road
Pitman, New Jersey 08071
PH: (856) 256-8983

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#28

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'40.0" Latitude: North 40°42'17.4"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,830 East 581,460

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.31

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

AUTHENTICATION

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#29

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'37.8" Latitude: North 40°42'18.6"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,950 East 581,620

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.32

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

AUTHENTICATION

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Name of Owner: Port Authority of New York & New Jersey

Name of Facility: United Airlines Hangar 14

Location: Newark – Liberty Interational Airport, Newark, New Jersey

Case Number(s): _____ (UST #, ISRA #, Incident #, or EPA #)

LAND SURVEYOR'S CERTIFICATION
Well Permit Number: _____.

(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW#XX

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74°10'39.9" Latitude: North 40°42'15.8"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 681,670 East 581,460

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.96

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

NGS Cors Station, "NJI2", NAD '83 (Horizontal), NAVD' 88 (Vertical)

Significant observations and notes: _____

_____

AUTHENTICATION

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Charles E Szovati 11/10/05

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APPENDIX C

NJDEP LOW FLOW SAMPLING PROTOCOL

Low-Flow Purging and Sampling

A. Method Summary and Application

The purpose of Low-Flow Purging and Sampling (LFPS) is to collect groundwater samples from monitor wells that are representative of ambient groundwater conditions in the aquifer. This is accomplished by setting the intake velocity of the sampling pump to a flow rate that limits drawdown inside the well. LFPS has three primary benefits. First, it minimizes disturbance of sediment in the bottom of the well, thereby producing a sample with low turbidity. Second, LFPS minimizes aeration of the groundwater during sample collection. Third, the amount of groundwater purged from a well is usually reduced as compared to conventional groundwater purging and sampling methods.

Because the method allows collection of groundwater samples with low turbidity, it was originally used for collecting samples for inorganics analysis. The method typically allows the collection of samples for total metals analysis and eliminates the need to filter the samples for dissolved metals analysis. In addition, since the method minimizes aeration of the samples, it can be used to collect samples for analysis of volatile and semi-volatile organic compounds (VOCs and SVOCs), provided that appropriate pumps are used in sample collection, as discussed below.

Advantages of LFPS are:

- Groundwater samples tend to be more representative of actual aquifer conditions with respect to mobile contaminants and turbidity
- It causes minimal disturbance of the formation adjacent to the screened interval
- It is generally less prone to sampling variability compared to other groundwater sampling techniques (e.g., bailers)
- Smaller purge volumes and associated disposal expense
- Increased sample consistency from dedicated systems and reproducibility of data due to reduced operator variability

Disadvantages of LFPS are:

- Misconceptions regarding reduced purging and sampling time
- Sampling from non-dedicated systems requires greater set-up time
- Sampling from dedicated systems requires higher initial capital expenses
- Increased technical complexity
- Increased training needs for sampling personnel
- Attractiveness of advantages may lead to improper and inconsistent application
- Typically not a "first round" sampling option
- Not recommended for wells with long screen intervals unless multiple samples are collected

1. Introduction

The following procedures are specific to LFPS of monitor wells in New Jersey. These procedures were developed in consideration of the USEPA-Region I guidance document dated July 30, 1996

(http://www.epa.gov/region01/measure/well/lowflow8.pdf) and the USEPA-Region II guidance document dated March 16, 1998 (http://www.epa.gov/Region2/desa/hsw/lowflow.txt). In addition, the U.S. Geological Survey's (USGS) Techniques of Water-Resources Investigations, Book 9, National Field Manual for the Collection of Water-Quality Data was consulted (http://water.usgs.gov/owq/FieldManual/). The reader is encouraged to review these guidance documents prior to performing LFPS. The procedures provided in the USEPA and USGS guidance must be followed except where they differ from the information provided below.

2. Low Flow Policy

In the event that a responsible party is conducting a Remedial Investigation without Departmental oversight, submittal of a sampling plan is not required. However, it is highly recommended that the responsible party seek approval for any deviations from this guidance prior to conducting LFPS. In the event that a responsible party decides to use LFPS without submitting a sampling plan and receiving approval, it must be recognized that any deviations from this guidance may result in rejection of the data. In addition, when submitting the results of the LFPS event, the responsible party must include specific details of the LFPS techniques used which demonstrate that they were consistent with the guidance specified below. The responsible party shall also provide adequate rationale justifying any deviations from this guidance whether or not they were previously approved by the Department.

It is also Departmental policy that LFPS is not an acceptable method for any wells with screened or open borehole intervals greater than 5 feet in length **unless:** 1) multiple locations at five-foot intervals along the screen/borehole are sampled, or 2) the data quality objectives (DQOs) warrant sampling a specific zone (e.g., the shallow water table to investigate the potential for vapor intrusion inside a building) or specific zones where sufficient geophysical (e.g., heat-pulse flowmeter, caliper and temperature logs, etc.) and hydrogeological information (e.g., tracer tests) or other evidence (e.g., stained soils or fractures noted on boring logs) that **clearly** identifies the depth(s) at which contaminants are entering the well screen or open borehole.

Once the collection of multiple samples (vertical profiling) in a well has been completed, long-term sampling of the well may require LFPS at fewer depth intervals, or even just one depth interval, depending on the data quality objectives of the sampling and the types of contamination present in the groundwater (e.g., LNAPL, DNAPL, etc).

3. Laboratory Certification (N.J.A.C. 7:18)

N N.J.A.C. 7:18 requires that any environmental laboratory* submitting analytical data to the Department, regardless of quality level, must be certified by the Office of Quality Assurance. This applies to those firms using LFPS instruments associated with the "analyze immediately" category of water quality indicator parameters (WQIPs) including pH, temperature, and dissolved oxygen. Regardless of whether or not the equipment in question is rented or privately owned the requirement for certification can not be ignored. All certification documentation must accompany the instrument into the field and accompany all WQIP data submitted to the Department. (*Environmental laboratory is defined as any laboratory, facility, consulting firm, government or private agency, business entity or other person that the Department has authorized, pursuant to N.J.A.C. 7:18, to perform analysis in

accordance with the procedures of a given analytical method using a particular technique as set forth in a certain methods reference document and to report the results from the analysis of environmental samples in compliance with a Departmental regulatory program).

B. Specific LFPS Considerations

1. Pump Intake Location

When LFPS is performed correctly, the data being collected should be a snapshot of a narrow zone along a length of well screen or fracture in an open borehole. For these reasons, it is important to place the pump intake in the zone of highest contaminant concentration or contaminant flux along the screened/open-hole interval. This is particularly important in wells constructed with more than 5 feet of well screen.

Information to be considered when selecting the pump intake depth should include: 1) evidence of soil/sediment contamination from boring logs; 2) soil/sediment sampling analytical results; 3) vertical profiles of groundwater and soil contamination developed from direct-push sampling and field-screening techniques; and; 4) lithology/stratigraphy, particularly the permeability of the aquifer materials.

Typically, the most permeable zones are selected for the pump intake location since the majority of contaminant mass will be transported through them, particularly as the plume migrates downgradient of the source area. Identification of these zones may be made from borehole geophysical data, (e.g., resistivity, fluid conductance, or natural gamma logging, etc.) and hydraulic conductivity data or grain-size analyses. The use of a series of passive-diffusion-bag samplers in a well may also help to identify the zone of highest VOC contamination. The physical/chemical behavior of the contaminants of concern should be considered when determining the pump intake depth . For example, gasoline-related contaminants may be present near the water table while chlorinated VOCs may be present deeper in the aquifer. If a well is contaminated by both types of contaminants, both may need to be sampled, each from a discrete sampling interval.

As discussed above, LFPS is not an option in wells with screened intervals that exceed 5 feet in length, **unless** multiple sample locations at five-foot intervals along the screen/borehole are investigated. Monitor wells screened across zones of significant geologic heterogeneity or open boreholes in fractured rock may be subject to significant vertical flow. Under those conditions, use of packers to isolate specific zones should be considered.

2. Water Quality Indicator Parameters (WQIPs)

For groundwater investigations in New Jersey utilizing LFPS, the following parameters must be measured in order to determine when well stability has been achieved prior to sampling. Their respective measurements must fall within the stated range for three consecutive readings. If the anticipated "third" reading of any individual parameter does not fall within the stated range, then the process to achieve three consecutive readings for that parameter must be restarted. If, after four

hours, stability has not been achieved for the parameters listed below, follow the recommendations above.

Water Level Drawdown	< 0.3 ft*
pH	± 0.1 unit
Specific Conductance	± 3%
Temperature	± 3%
Dissolved Oxygen	± 10%
Turbidity	± 10% for values greater than 1 NTU
ORP/Eh	± 10 millivolts

* During pump start-up, drawdown may exceed the 0.3-ft target and then recover as flow-rate adjustments are made. In wells with short screens (i.e., 5 to 10 ft long) or when sampling for gasoline constituents at the water table, it is much more important to limit the drawdown to less than 0.3 ft, for example, than a well with 15 ft of screen being sampled for metals only with the pump intake set in a permeable zone 5 ft or more below the water table. When sampling groundwater for VOCs and SVOCs, aerating the water by allowing it to cascade down the inside of the well should be avoided. Therefore, drawdown should not expose the screen more than 0.3 ft below the static water level in the well.

Measurements should be taken once every 5 to 6 minutes. This interval is based upon the time it takes for purge water to replace one flow-through-cell volume (generally 250 ml) and the time it takes to measure and record the data. If the purge rate decreases or if the flow cell volume is increased, the time required for purge water replacement will increase. Forms at the end of this document should be used to record drawdown and the WQIPs.

WQIP measurements must be collected in a manner that will insure integrity of the data being collected. To insure consistency of the data, consideration of the following must be made: 1) tubing diameter, length, and material of construction; 2) flow-through cell design, capacity, decontamination, and "purge-train" set-up; 3) pump selection and plumbing fittings; 4) calibration of flow-through cell probes; 5) purge rate; and, 6) water-level-measurement technique.

3. Purge Volume vs. Stabilization Time

In some cases, it may take considerable time to achieve stabilization of the WQIPs. In other cases, they may never stabilize. However, as provided in USEPA guidance, the following options are available if stability has not been achieved after **FOUR** hours of purging: 1) continue purging until stabilization occurs, no matter how long it takes; 2) discontinue purging, do not collect a sample and document the attempts to reach stabilization; or 3) discontinue purging, collect a sample and document the attempts to reach stabilization. In situations where WQIPs do not stabilize, the sampler must document that LFPS could not be performed and document in the report how the samples were collected.

While every effort should be taken to assure that all of the WQIPs stabilize prior to sample collection, one should keep in mind that the stabilization of some WQIPs may be more difficult to achieve than others. Also, achieving stabilization of some WQIPs may be more important with respect to some contaminant types (e.g., metals versus VOCs, etc.) than others. For example, total metals concentrations tend to increase with increasing turbidity of a water sample due to sorption of metals on solids in the water. Similarly, VOC concentrations may be affected by dissolved oxygen (DO) concentrations (i.e., whether the groundwater is aerobic or anaerobic). In addition to providing information on the effectiveness of LFPS, collection of accurate DO data also aids in the evaluation of monitored natural attenuation (MNA) of VOC plumes. Similarly, temperature data can provide useful information regarding the sampling method. For example, temperature increases resulting from dissipation of heat generated by the submersible pump or from exposure of the tubing to excessive heat at the ground surface can have a significant impact on VOC concentrations in water samples.

If, for whatever reason, a WQIP is not accurately measured during the monitoring process or a certain WQIP does not stabilize, and that particular WQIP **is not** significant with respect to the type of contaminant of concern, sample collection may still proceed. For example, if DO data do not stabilize but all of the other WQIPs including drawdown and turbidity stabilize and samples will be collected for metals only, then the samples may be collected. However, any WQIPs that are affected by field conditions or instrument malfunction, must be discussed in the text of the report in order to alert the end-user of potential data bias. If questions arise regarding when stabilization occurs, the sampler should contact the Department's assigned case manager for the site, if any, either prior to (preferably) or when performing LFPS.

4. Tubing

The inside diameter (ID) of tubing should be no greater than three-eighths of an inch (3/8-in). Quarter-inch (1/4-in) tubing is preferred. Larger tubing diameters reduce flow velocity resulting in a corresponding increase of pump speeds to maintain flow. Increased pump speed will, in turn, elevate the potential for turbulent flow across the screened interval and this may affect the quality of the water being sampled. Conversely, any reduction in flow velocity may allow air to become trapped in the tubing, which may ultimately affect air-sensitive parameters or allow particulates to settle, which may affect turbidity values.

The length of tubing, from the top of the well casing to the flow-through chamber, should be the shortest length manageable. Attention to this detail will help ensure that: 1) exposure to ambient temperature, direct sunlight, and bubble formation are kept to a minimum, and 2) deposited solids or air bubbles will less likely be trapped in tubing bends and re-mobilized after accidental movement. Occurrence of any one or combination of these factors can cause variations in WQIP measurements, which could increase stabilization time. Therefore, tubing must be completely full of water at all times.

If the sampling plan calls for multiple sample locations within the well screen, sampling should proceed from the top location to the bottom location. This will require that additional tubing be coiled at the surface to allow for pump relocation to the next deeper sampling location. In these instances,

the coiled tubing must be protected from ambient conditions and the ground surface, in order to avoid impact to the WQIPs and sample data.

The tubing's material of construction must be either Teflon® or Teflon®-lined polyethylene up to the flow-through cell. This is consistent with collection of any groundwater sample. Tubing downstream of the flow cell may be constructed of a lower-quality, more flexible material. However, when sampling for metals analysis only, the tubing may be constructed of flexible polypropylene or polyethylene.

Tubing "reuse" is not recommended when sampling well-to-well since decontamination of tubing is difficult and time consuming. If tubing is to be reused, it must undergo a rigorous decontamination procedure, which must include a hot water wash/hot air drying process. In addition to the hot water wash/hot air drying, separate decontamination solutions of acetone and nitric acid may have to be pumped through the tubing for 15 minutes, followed by copious amounts of distilled, deionized water rinses. The cost of labor associated with decontamination, including the special handling of cleaning solvents and acid, often exceeds the cost of simply discarding the old tubing and using new tubing for each well. If a decision is made to reuse tubing, then one of the following requirements in the USGS "Water-Quality National Field Manual" must be considered: 1) Collect additional field blanks if VOC concentrations in the last sample collected through the tubing are greater than 500 µg/L, or 2) The tubing should be replaced, rather than cleaned, if VOC concentrations in the last sample exceed 700 µg/L.

5. Flow-Through Cell

Typical flow-through cell design is not complicated and almost all on the market today have common shared features. Cells should be transparent in order to "see" the physical condition of the purge water or air bubbles passing through the system. Highly turbid or iron bacteria-laden water can be visually monitored for change as the purge progresses. The cell must be sealed against unwanted exposure to the atmosphere, thus insuring accurate measurement of air-sensitive parameters (dissolved oxygen, pH, etc.). The total capacity of the cell must be small (<300 ml) in order to maintain a desirable turnover rate of water coming into the cell to ensure real-time data integrity. The in-line design must allow for purge water to enter the flow cell from a bottom port and exit at the top. The discharge may be fitted with a check valve.

Upon initial pump startup, it is good practice to not connect the pump discharge line to the flow-through cell. This will allow the sampler time to monitor drawdown, stabilize the flow rate and prevent fowling of probes by bacteria, sediment, or NAPL. Once drawdown measurements indicate that the flow rate has been controlled and a few minutes (<10) have been allowed to clear any unwanted material, the pump discharge line can then be connected to the flow cell.

Flow cell decontamination is important, not only to reduce the potential for cross contamination, but also to ensure data integrity and consistent instrument performance. The cell and probes should be rinsed with distilled/deionized water between each monitor well as accumulation of suspended material may impact probe performance. If they are exposed to contaminants, use a mild detergent or laboratory glassware cleaning solution. Flow cell exposure to high levels of contamination may

damage probes and require their repair by the manufacturer. Since LFPS is NOT normally a first-round sampling option, knowledge of contaminant levels will generally be known prior to the cell's exposure to purge water.

The location of the flow cell or cells in relation to the sample port is critical. Samples for turbidity measurement, general chemistry and laboratory analysis must be collected ahead of the flow cell. When two cells are used in series, the dissolved oxygen probe must be located in the first cell.

Set up the flow-through cell in a location which will cause minimal fluctuation of the flow rate due to elevation changes in the sample tubing as the tubing is disconnected from the cell prior to sample collection. It is also important to locate the flow-through cell as close as possible to the well head in order to minimize the length of tubing needed between the well head and flow-through cell. The flow-through cell must be protected from ambient conditions and the ground surface.

6. Pump Selection

Pumps used for monitoring WQIPs must be submersible, positive-displacement pumps. Examples of acceptable positive-displacement pumps include bladder, variable-speed submersible-centrifugal, reciprocating-piston, progressive-cavity, and gear pumps. The pump discharge must be fitted appropriately to receive either ¼- or 3/8-inch inside-diameter (ID) Teflon® or Teflon®-lined polyethylene tubing.

Peristaltic pumps are suction-lift pumps which can create a negative pressure gradient. Therefore, their use is not appropriate when collecting groundwater samples for analysis of organic compounds. However, peristaltic pumps may be used for the collection of groundwater samples for analysis of inorganic compounds. It should be kept in mind, however, that sampling with peristaltic pumps may affect the stabilization of some WQIPs including dissolved oxygen, pH and redox potential. Since these WQIPs can be affected by the peristaltic pump, this pump should not be used when these data are to be used to evaluate the effectiveness of Monitored Natural Attenuation of groundwater.

Two basic collection scenarios have a bearing on pump selection. These include: 1) a permanently installed pump system, or 2) a portable (well-to-well) pump installation. Bladder pumps can be used for either scenario, however, only those with disposable bladders and easily cleaned parts are suitable when sampling on a well-to-well basis. Variable-speed submersible-centrifugal pumps, gear or progressive-cavity pumps can be used for either scenario as long as they are constructed of easy to clean stainless steel/Teflon® parts. Pumps constructed with impellers, helicoils, or gears, which are difficult to clean or are constructed of unacceptable plastic parts, are not suitable for sampling. In addition, when conducting LFPS on a portable basis, the power or gas supply line should be isolated from the sample tubing. Power supply and sample tubing lines that form a single unit do not allow for easy decontamination and are not recommended.

7. Plumbing Fittings

A check valve should be incorporated into the tubing train or flow cell discharge to eliminate accidental drainage and subsequent aeration of the flow cell. More importantly, a check valve will

prevent a back-surge of purged water being reintroduced at the screen interval of the well should the power source or pump experience mechanical failure. A back-surge of purge water into the screened interval of the well may result in variability of the WQIPs and create analytical bias. In order to avoid the need to decontaminate the check valve, it may be placed on the discharge side of the flow cell or installed immediately above the pump discharge. Some flow-through cells have check valves built into the unit. By design, bladder pumps also have a check valve built into their construction.

A ¼- or 3/8-inch ID barbed "T" or "Y" fitting, placed ahead of the flow cell, may be used to establish the line which will receive a needle valve for turbidity, general chemistry and analytical sample collection. The "T" or "Y" fitting used should be constructed of Teflon® or stainless steel and decontaminated between each use, if used for analytical samples. The fitting may be constructed of polyethylene and decontaminated between each use if it is only used to sample for turbidity and general chemistry parameters. If analytical samples are collected through the "T" or "Y" fitting and needle valve, then those parts must be incorporated into the field blank collection technique.

When collecting a sample at the port ahead of the flow cell, a flow control valve (stainless-steel needle valve [preferred] or stainless steel/Teflon ball valve [optional]) must be used to prevent backpressure and air bubbles from forming in the tubing (see http://water.usgs.gov/owq/FieldManual/chap4_rpt.pdf, page 84). The "needle valve" offers versatility as it can be used for collection of turbidity, general chemistry **and** analytical samples. It can be used with Teflon® tubing and can be used to control sample flow rate because the design significantly reduces any backpressure gradient. Like all other sampling equipment, the "needle valve" must be decontaminated before use at any well.

8. Calibration of Probes

CALIBRATION OF THE PROBES USED TO MONITOR WATER QUALITY INDICATOR PARAMETERS MUST TAKE PLACE **IN THE FIELD PRIOR** TO THE DAY'S EVENTS. THE OFFICE OF QUALITY ASSURANCE MUST CERTIFY THE PROBES USED FOR pH, DISSOLVED OXYGEN AND TEMPERATURE MEASUREMENT.

There are no exceptions to these rules. Probe calibration is critical to the accurate and precise measurement of WQIPs.

For warranty purposes, **all** manufacturers' instructions for proper care and calibration must be followed. Solutions for probe calibration must be held to the temperature of the liquid (groundwater) being measured as temperature correlation is critical in calculating conductivity, dissolved oxygen and pH. Tables and equations to compensate for the difference between ambient groundwater and calibration solution temperature are sometimes provided in the operating manuals or with the calibration solutions. Some instruments are designed with internal features to compensate for this difference in temperature. The respective difference between calibration of conductivity and specific conductivity requires compensation for groundwater temperature at the time of calibration vs. solution temperature adjusted to 25°C at the time of calibration. For dissolved oxygen, the flow cell itself must

be maintained at the temperature of groundwater during calibration. All efforts made to account for proper temperature control of solutions during calibration must be reported to the end user. All steps must be recorded in the field notes. No sampling shall commence until all instruments are calibrated and operating properly. See the "Tips" section below for further discussion on Temperature of Calibration Solutions.

9. Water Level Measurements

The depth to the top of the water column must be recorded prior to pump installation and/or prior to purging. If the **total** depth of the well needs to be determined (e.g., to verify the correct well designation and/or to determine if silt has accumulated in the bottom of a well), it should be measured at least 48 hours prior to sample collection or after the sample has been collected and the pump removed. Total depth measurements must never be taken immediately before purging as this may cause the re-suspension of solids in the well and prolong the purge time.

Once the initial water-level measurement has been recorded and the pump installed, suspend the water-level probe in the well at the point at which drawdown is equivalent to a 0.3-foot drop. Record water levels simultaneously with WQIP measurements once every five minutes.

Water-level-measurement devices, which may impart some disturbance to the water column (i.e., stainless steel "popper" or coated tape), are not acceptable.

10. Pump Installation

LFPS pump installation can be divided into two general collection scenarios: permanent and portable (well-to-well). Permanent pump installation is the most desirable. Among other advantages are improved consistency in data acquisition and reduced long-term labor, preparation and material costs. However, permanent installation is more typically associated with long-term monitoring due to the high initial capital investment required.

The more common practice is to use a pump on a portable or well-to-well basis. While initial capital investment is comparatively less than that of a permanent installation, this practice requires close attention to quality control aspects of pump selection, preparation and decontamination.

Once pumps have been properly decontaminated and fitted with appropriate tubing, installation of the pump can begin. Ideally, pumps should be installed 24 to 48 hours prior to initiation of purging. However, this is not always practical, especially when site security can not be guaranteed. In addition, wells constructed with flush-mount casing are difficult to protect from storm water or infiltration of other contaminants during the extended period monitor wells are open.

Pumps must be installed in such a manner as to insure any disturbance in the well is kept to an absolute minimum. Once pumps reach the top of the water column, their descent should proceed very slowly through the water column. The actual level where the pump intake is to be suspended must be predetermined. Under no circumstance should the pump make contact with, or be "bounced" off, the bottom of the well.

One helpful method to insure proper intake location is to accurately measure and pre-cut the tubing for each individual well prior to site activity. A mark can be made on the tubing, which coincides with the top of the well. Cutting the tubing off-site in a controlled setting is most desirable. Tubing can be wiped down with paper towels, moistened with distilled/ deionized water, labeled and then sealed into plastic bags until needed. If this practice is used, be sure to allow enough tubing to account for the distance from the top of the well casing to the flow cell.

11. Purge Rates

Control over the purge rate is one of the most critical aspects of this technique. Once the pump is set within the screened interval at the desired location, a clean electronic water-level-monitoring device is lowered approximately 0.3 ft into the water column. Start the pump at a speed that results in a flow rate in the range of 100 to 500 ml/min. Pump the initial purge water to waste in order to prevent any fouling of the flow-through cell. *With the pump running,* connect the tubing to the cell. Make sure that all air is purged from the tubing and flow cell as the system fills with purge water. For LFPS, the pump speed must remain constant such that flow rates never exceed 500 ml/min and, once stabilized, the flow rate must not be varied, even during sample collection. If drawdown continues to exceed 0.3 ft., reduce the pump speed until the drawdown has stabilized but do not adjust pump speed to a flow rate below 100 ml/min. Flow rates below this level may induce pump stalling and undo the effort to reach stabilization. If drawdown does not come under control at 100 ml/min, then a field decision should be rendered as to how far to allow drawdown to continue until sample collection. At no time should evacuation allow any portion of the well screen to be exposed (for wells screened below the water table) or bring the well to dryness.

Adjustments to pump speed are best made during the first 15 minutes. Once a "feel" for the purge rate is obtained, begin recording well stabilization indicators. Any significant change to purge rates after this time may negatively impact well stabilization measurements.

Purge rates are best monitored by measuring the flow from the discharge side of the flow cell with a graduated cylinder. Record all of the required WQIPs once every 5 minutes. Once stability has been attained and recorded, begin sample collection

12. Sampling

Once WQIPs have stabilized, or a 4-hour time decision has been rendered, sampling can proceed. Do not adjust the flow rate; maintain the same pumping rate during sampling that was used to purge the well. Collect the sample directly from the needle valve at the sample port. The needle valve allows for sample collection with significantly reduced backpressure and turbulence and offers the best means for sample collection without affecting water quality. It also allows for monitoring using the flow-through cell during sample collection, thereby allowing a final WQIP measurement to be recorded immediately after sample collection. This is the preferred method, especially if volatile organic compounds are the parameters of concern. Any exceptions to this technique must first be approved in writing from the NJDEP on a case-by-case basis before commencing sampling operations.

If higher than expected water temperatures are being observed, evaluate whether the submersible pump is overheating. If the pump motor is not suspected, check the system for any exposure to direct sunlight, especially during warmer periods of the year.

13. Pump Decontamination

The pump forms one of the two key elements of sampling equipment (tubing is the other). The importance of proper pump decontamination is especially true when pumps are rented and utilized on a well-to-well basis. Never assume that rented pumps have been thoroughly cleaned. **Pumps constructed with plastic parts, or sealed inner workings that are inaccessible to direct handling are not an option for LFPS well-to-well consideration because of their limited ability to be decontaminated thoroughly**.

Most bladder pumps can not be easily decontaminated in the field due to their unique construction. For that reason, bladder pumps are not employed on a well-to-well basis **unless** they are constructed with easy to clean parts and *disposable* bladders. Bladder pumps are best suited for dedicated (permanently installed) scenarios. Another popular pump, the variable-speed, 2-inch diameter submersible, is more adaptable for well-to-well sampling; however, close attention to decontamination is warranted. One manufacturer, Grundfos®, clearly states in the operational handbook that the pump must be completely disassembled, including removal of the motor shaft from the stator housing, and all components within the impeller housing. Care must be taken upon reassembly to insure that the cavity housing the motor shaft is *completely* refilled with distilled/deionized water. Care must also be taken with this pump during periods of cold weather to avoid freezing of the coolant water. Proper decontamination not only helps to ensure more reliable data; it also prolongs the life of any pump.

14. Field Blank Collection

When employing LFPS techniques, collection of the field blank must follow the same general rules for all groundwater sampling equipment. This includes the requirement that "all" sampling equipment, which comes in contact with the sample, must also come into contact with the field blank water. To overcome some of the difficulties that manual field blank collection through the inside of a pumping system creates, the following procedure is strongly recommended. Fill a 1000-ml decontaminated, graduated glass cylinder with method blank water supplied by the laboratory performing the analysis. Place a properly decontaminated pump into the graduated cylinder with sample tubing and plumbing fittings attached. Activate the pump and collect the required field blank samples. As the water is removed from the cylinder, replace it with additional method blank water. This procedure will require that the laboratory supply larger volumes of field blank water i.e., bulk water in liter or 4-liter containers. The traditional requirement that field blank water be supplied in the same identical containers as the sample being collected can not be practically satisfied when using LFSP. The identical bottle-to-bottle field blank requirement is waived for this sampling technique procedure only.

15. Tips

a). Temperature Measurement and Submersible Pumps

Variable-speed submersible pumps such as the Grundfos® Redi Flo 2 pump use water to cool the motor during operation. Sometimes, reduced flow rates may result in insufficient cooling of the motor and may elevate the temperature of the water to a point where it may begin to affect sample integrity. If the pump is used in low-yielding, two (2)- or four (4)- inch-diameter wells, temperature increases that do not stabilize may result. If this is observed, a field decision must be made to either discontinue or continue with LFPS. If all other WQIPs have stabilized, then collecting the sample and qualifying the water-quality data accordingly may be acceptable. If the temperature increase continues and eventually exceeds 40% of the initial recorded temperature (Celsius) and other WQIPs have not stabilized, sampling should be discontinued. Turning the pump off and on to control overheating is not acceptable. Always keep in mind that elevated temperature has a direct relationship with dissolved oxygen, specific conductance and, to a lesser degree, pH measurement. Higher temperatures may also reduce the concentrations of volatile organic compounds in groundwater samples due to their relatively high Henry's Law constants. If sampling with submersible pumps continues to result in elevated water temperature, other sampling alternatives should be discussed with the appropriate regulatory program.

When using some submersible pumps in large-diameter wells (six inch and greater), overheating of the motor, followed by mechanical shutdown and possible motor damage, may occur. This is the result of water being drawn to the pump intake in a more horizontal flow pattern which diminishes the design feature that normally moves cool water vertically across the motor (stator) housing. The use of specially designed shrouds may overcome this condition.

b). Control of Pump Speed

In order to achieve the high turning speeds, low-speed startup torque is generally lacking in some submersible pumps including the Grundfos® Redi Flo 2 pump. When attempting to control initial drawdown and/or sample flow rates, it is possible for the pump to cease pumping. Then, if a check valve has been installed, the pump may not have enough torque to overcome the head pressure when attempting to restart it. Sometimes, turning the pump to the highest speeds will overcome this situation or sometimes the pump may have to be pulled from the well and reinstalled. Neither of these corrective measures is conducive to LFPS. To avoid this scenario, make sure the control box comes equipped with a "ten turn pot" frequency adjustment knob. This will allow significantly greater control over pump speeds and the risk of losing pump flow will be reduced.

c). pH

Monitoring for stabilization of pH in groundwater is relatively straightforward and rarely requires serious troubleshooting. When calibrating for pH, do a two-point calibration, at a minimum. The calibration range should bracket the anticipated pH. If the pH is unknown, then a three-point calibration must be made. The temperature of the buffer solutions should be as close to the

temperature of the groundwater as possible. If the probe does not calibrate properly, check to make sure that the probe's electrical contact points are dry. As with preventative maintenance of any probe, make sure that the pH probe is rinsed with distilled/deionized water between use and cleaned periodically per the manufacturer's specifications. Overnight storage generally requires placement of the probe into a 2-molar (M) solution of potassium chloride. This solution may cause an unwanted build up of salt, therefore, frequent rinsing is necessary.

d). Temperature of Calibration Solutions

Correct field measurement of dissolved oxygen, conductivity and pH requires tight control over calibration solution temperature. Proper calibration calls for solution temperatures of these parameters to be the same as the groundwater being measured. This may be difficult to achieve when field sampling well-to-well as groundwater temperature can vary between wells based on depth, local setting (asphalt vs. open field) and other atmospheric and hydrogeological factors. In addition, it is logistically difficult to bring solutions to groundwater temperature at the point of pump intake without first installing the pump, collecting purge water and allowing sufficient time to bring calibration solutions to appropriate temperatures.

For the purposes of LFPS in New Jersey, calibration solution temperatures and the flow-through cell itself must be maintained at approximately 54° F (12° C ± 2° C) during calibration. When ambient conditions warrant, this will require the suspension of the solutions and flow-through cell in a container/bucket of water at the aforementioned temperature. When calibrating for dissolved oxygen, always make sure the cell is vented to the atmosphere by attaching short pieces of tubing to the inlet and outlet fittings while the cell is submerged.

During the purge phase, record the difference between the stabilized temperature and the temperature of the calibration solutions. This information must be presented to the end user. If the sampling event is extended for two or more days, appropriate adjustments can then be made to more accurately reflect the groundwater temperature during calibration.

16. Low Flow Purging and Sampling for Low Yielding Wells

The principal focus of water supply well installation is well yield. In contrast, the principal focus of monitor well installation is water quality; well yield is of secondary importance. In an attempt to locate and delineate groundwater contamination, monitor wells are frequently installed in low-yielding water-bearing zones.

Low-yield wells present challenges with respect to representative groundwater sample collection. The removal of water by bailers draws down the water level in the well by slug- type increments. Peristaltic pumps draw water out of the well by vacuum (negative pressure) which may result in degassing and VOC loss. The operation of variable-speed, submersible pumps at low flow rates may result in heating of the sample as it flows around and through the pump, which may also lead to degassing and VOC loss.

LOW FLOW SAMPLING
DATA SHEET

SHEET ____ OF ____

SITE: _____ CONSULTING FIRM: _____
DATE: _____ FIELD PERSONNEL: _____
WEATHER: _____

MONITOR WELL #: _____ WELL DEPTH: _____ SCREENED/OPEN INTERVAL: _____
WELL PERMIT #: _____ WELL DIAMETER: _____ inches

PID/FID READINGS (ppm): BACKGROUND: _____ PUMP INTAKE DEPTH: _____ ft below TOC
BENEATH OUTER CAP: _____ DEPTH TO WATER BEFORE PUMP INSTALLATION : _____ ft below TOC
BENEATH INNER CAP: _____

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
				NA		NA		NA		NA		NA		NA		

COMMENTS:

*INDICATOR PA[illegible] METERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE W[illegible]IN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature;
± 10 mv for R[illegible] Potential; and ± 10% for Dissolved Oxygen and Turbidity

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD INSTRUMENT AND CALIBRATION DATA

SITE:_____
DATE: _____
FIELD PERSONNEL:_____
START TIME:_____ **STOP TIME:**_____

	METER	PROBE
DO	_____	_____
PH	_____	_____
SPEC. COND.	_____	_____
ORP	_____	_____
TURBIDITY	_____	_____

DISSOLVED OXYGEN **TURBIDITY** **ORP**

Standard **Reading**

Water Temp_____ **D.I. Water** _____ **Standard Temp.**_____
Baro. Pres. _____ _____ **Standard Conc.**_____

Saturation	_____	_____	_____	**Initial Reading**	_____
Init. Mtr. Rd.	_____	_____	_____	**Meter reset to**	_____
Mtr. reset to	_____	_____	_____		
O_2 Satur. %	_____	_____	_____		

SPECIFIC CONDUCTANCE

	Conc.	Initial Reading	Meter Reset to	Temperature	Lot # and Exp. Date
Standard#1	_____	_____	_____	_____	_____
Standard#2	_____	_____	_____	_____	_____
Standard#3	_____	_____	_____	_____	_____
Standard#4	_____	_____	_____	_____	_____

pH CALIBRATION

Buffer	Temp.	Initial Reading	mV	Meter Reset To	Lot # and Exp. Date
4	_____	_____	_____	_____	_____
7	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____

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APPENDIX D

WATER SAMPLING LOGS

GROUNDWATER SAMPLING FORM

Well No.: MW-23

Well Type: ☒ Monitor ☐ Extraction ☐ Other _____

Job Name: UAL-Newark Liberty Well Material: ☒ PVC ☐ St. Steel ☐ Other _____
Job Number: 8513.002 Task _____ Date: ~~03-28-05~~ 5/13/05 Time: 09:15
Recorded By: B. Adams (Signature) Sampled By: B. Adams (Sampling Team Members)

INSTRUMENT IDENTIFICATION RECORD

Instrument	PID	pH	Conductivity	Temp.	Dissolved O_2	Turbidity	ORP	Depth to Water	PID Reading (Inside inner casing)
Serial No.	N/A	Horiba	Horiba	Horiba	Horiba	Horiba	Horiba	Heron	N/A

For Calibration Information, see Instrument Calibration Record dated Field Calibration 5/13/05

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches): 4"
Total Depth of Casing (TD in feet BTOC): 14.35'
Water Level Depth (WL in feet BTOC): 9.54'
Number of Well Volumes to be Purged: NA
Screened Interval in Feet (BTOC) from ____ to ____
or water column

PURGE METHOD

☐ Bailer - Type: _____
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: Geopump
Other - Type: _____

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☒ Middle of water column Other: middle of screened interval
Pump set @ 11.5' bgs

PURGE VOLUME CALCULATIONS

Depth in feet (BTOC) _____

(_____ - _____) X _____ ^{2} X 3 X 0.0408 = _____ Gallons
TD (feet) WL (feet) D (inches) No. Volumes Calculated Purge Volume

FIELD PARAMETER MEASUREMENT

Time	Minutes Elapsed	Rate (mL/min)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTUs)	DO (mg/L)	Temp. (°C)	ORP (mV)	Depth to Water (ft t.o.c.)	Comments
0830	0									9.53	Begin Purge
0833	3	500	1.25	8.27	2.27	32.4	.32	19.65	-152	9.61	
0836	6	600	1.50	8.39	2.26	0.0	0.00	19.75	-154	9.65	
0839	9	500	1.25	8.46	2.24	0.0	.36	19.74	-154	9.66	
0842	12	300	1.875	8.48	2.23	5.9	.03	19.74	-151	9.67	
0845	15	300	~2.75	8.26	2.22	6.2	0.00	19.74	-150	9.68	
0849	19	500	~2.75	8.24	2.22	52.7	0.00	19.79	-149	9.69	Becoming Turbid
0941	21	600								9.70	SAMPLE
0914	24										
0917	27									9.70	Purged 6 Gals
0920	30										
											3 40mL VOA's w/ HCl
											3- 1L Amber unpreserved

Note: GT = Greater Than LT = Less Than.
NM = Not Measured. NC = Not Collected.

OBSERVATIONS DURING WELL PURGING

Well Condition: Oil Color: clear
Turbidity (Qualitative): low Odor: Petroleum Other: _____
Purge Water Disposal: ☐ San. Sewer ☐ Storm Sewer ☒ Drum: Type 35-gal Carbon Size ____ (Other:) ~~ground surface~~ O/W Sep. or Drum

GROUNDWATER SAMPLING FORM

Well No.: MW-65

Well Type: ☒ Monitor ☐ Extraction ☐ Other _____

Job Name: UAL-Newark Liberty
Job Number: 8513.002
Well Material: PVC ☐ St. Steel ☐ Other _____
Task _____
Date: ~~03/28/05~~ 5/13/05 Time: 0930
Recorded By: _____ (Signature)
Sampled By: B. Adams (Sampling Team Members)

INSTRUMENT IDENTIFICATION RECORD

Instrument	PID	pH	Conductivity	Temp.	Dissolved O_2	Turbidity	ORP	Depth to Water	PID Reading (Inside inner casing)
Serial No	N/A	Horiba	Horiba	Horiba	Horiba	Horiba	Horiba	Heron	N/A

For Calibration Information, see Instrument Calibration Record dated field calibrated 5/13/05

WELL PURGING

PURGE VOLUME
Casing Diameter (D in inches): 4"
Total Depth of Casing (TD in feet BTOC): 13.40'
Water Level Depth (WL in feet BTOC): 8.76'
Number of Well Volumes to be Purged: NA
Screened Interval in Feet (BTOC) from ____ to ____
or water column

PURGE METHOD
☐ Bailer - Type: _____
☐ Submersible ☐ Centrifugal ☐ Bladder, Pump No.: (Geopump)
Other - Type: _____

PUMP INTAKE SETTING
☐ Near Bottom ☐ Near Top ☒ Middle of water column __Other: middle of screened interval
Pump set ~ 11.25' bgs

PURGE VOLUME CALCULATIONS
Depth in feet (BTOC)

(_____ - _____) X _____ ^{2} X 3 X 0.0408 = _____ Gallons
TD (feet) WL (feet) D (inches) No. Volumes Calculated Purge Volume

FIELD PARAMETER MEASUREMENT

Time	Minutes Elapsed	Rate (mL/min)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTUs)	DO (mg/L)	Temp. (°C)	ORP (mV)	Depth to Water (ft t.o.c.)	Comments
0940	0									8.76	Begin Purge
0943	3	500	1.50	7.76	1.98	0.1	.51	15.01	-131	9.04	
0946	6	500	2.10	7.81	1.96	0.2	.37	15.03	-135	9.11	
0949	9	500	~1.5	7.92	1.96	32.7	0.0	15.03	-141	9.12	
0952	12	600	~2.0	8.01	1.96	0.0	0.0	15.03	-143	9.14	
0955	15	600	~2.5	8.13	1.99	0.0	0.0	14.99	-145	9.15	
0958	18	600	~3.0	8.05	2.00	38.2	0.0	15.01	-148	9.15	
1001	21	600	~3.5	8.30	2.02	60.7	0.0	15.02	-148	9.15	
1004	24	600	~4.0	8.20	2.03	0.0	0.0	15.03	-150	9.15	
1007	27	600								9.15	Sample
1010	30										
										9.16	Pump off @ 1014
											3 - 40mL VOAs/MW1
											3 1L Amber unpreserved

Note: GT = Greater Than. LT = Less Than.
NM = Not Measured NC = Not Collected.

OBSERVATIONS DURING WELL PURGING
Well Condition: OK Color: CLEAR
Turbidity (Qualitative): low Odor: slight sulfury odor Other: _____
Purge Water Disposal: ☐ San. Sewer ☐ Storm Sewer ☒ Drum: Type 35-gal Carbon Size ____ Other: ~~ground surface~~ t/w separator on Drum

GROUNDWATER SAMPLING FORM

Well No.: MW-4

Well Type: ☒ Monitor ☐ Extraction ☐ Other _____

Job Name: UAL-Newark Liberty Well Material: ☑PVC ☐ St. Steel ☐ Other _____
Job Number: 8513.002 Task _____ Date: ~~03/28/05~~ 5/13/05 Time: 1005

Recorded By: BAdams (Signature) Sampled By: B. Adams (Sampling Team Members)

INSTRUMENT IDENTIFICATION RECORD

Instrument	PID	pH	Conductivity	Temp.	Dissolved O_2	Turbidity	ORP	Depth to Water	PID Reading (Inside inner casing)
Serial No.	N/A	Horiba	Horiba	Horiba	Horiba	Horiba	Horiba	Heron	N/A

For Calibration Information, see Instrument Calibration Record dated Field Calibrated 5/13/05

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches): 4"
Total Depth of Casing (TD in feet BTOC): 14.70'
Water Level Depth (WL in feet BTOC): 8.65'
Number of Well Volumes to be Purged: NA
Screened Interval in Feet (BTOC) from ____ to ____
or water column

PURGE METHOD

☐ Bailer - Type: _____
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: Geopump
Other - Type: _____

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☒ Middle of water column Other: middle of screened interval
Pump set @ 11.5' BTOC

PURGE VOLUME CALCULATIONS

Depth in feet (BTOC) _____

(_____ - _____) X _____ ^{2} X 3 X 0.0408 = _____ Gallons
TD (feet) WL (feet) D (inches) No. Volumes Calculated Purge Volume

FIELD PARAMETER MEASUREMENT

Time	Minutes Elapsed	Rate (mL/min)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTUs)	DO (mg/L)	Temp. (°C)	ORP (mV)	Depth to Water (ft t.o.c.)	Comments
1035	0									8.55'	Begin Purge
1038	3	600	1.50	8.95	2.64	0.0	1.71	15.41	-203	9.40	
1041	6	500	~1.0	9.42	2.58	0.0	0.00	15.07	-240	9.99	
1044	9	500	~1.5	9.54	2.58	17.0	0.0	15.01	-251	10.17	
1047	12	500	~2.0	9.64	2.58	493.0	0.0	15.05	-258	10.95	
1050	15	500	~2.5	9.73	2.53	123.0	0.0	15.03	-264	11.50	move pump down ~5'
1053	18	500	~3.0	9.66	2.51	186.0	0.0	15.01	-264	11.69	
1056	21									11.87	SAMPLE
1059	24										
1102	27										
1105	30									12.46	PUMP OFF @1104
											3-VOAs 40ml w/HCl
											9L tubes w/ preserv.

Note: GT = Greater Than. LT = Less Than.
NM = Not Measured. NC = Not Collected.

OBSERVATIONS DURING WELL PURGING: Well Condition: OK Color: Black Tint / Black
Turbidity (Qualitative): NC / low Odor: strong sewage odor Other: _____
Purge Water Disposal: ☐ San. Sewer ☐ Storm Sewer ☒ Drum: Type 35-gal Carbon Size ____ Other: ~~ground surface~~ Purge water in drum

GROUNDWATER SAMPLING FORM

Well No.: MW-24

MW-29

Well Type: ☒ Monitor ☐ Extraction ☐ Other _____

Job Name: UAL-Newark Liberty Well Material: 1 PVC ☐ St. Steel ☐ Other _____

Job Number: 8513.002 Task _____ Date: ~~03/28/05~~ 5/3/05 Time: 1135

Recorded By: _____ (Signature) Sampled By: B. Adams (Sampling Team Members)

INSTRUMENT IDENTIFICATION RECORD

Instrument	PID	pH	Conductivity	Temp.	Dissolved O_2	Turbidity	ORP	Depth to Water	PID Reading (Inside inner casing)
Serial No.	N/A	Horiba	Horiba	Horiba	Horiba	Horiba	Horiba	Heron	N/A

For Calibration Information, see Instrument Calibration Record dated Field Calibrated 5/3/05

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches): 2"

Total Depth of Casing (TD in feet BTOC): 16.1'

Water Level Depth (WL in feet BTOC): 10.39'

Number of Well Volumes to be Purged: NA

Screened Interval in Feet (BTOC) from ____ to ____ or water column

PURGE METHOD

☐ Bailer - Type: _____

☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No. Geopump

Other - Type: _____

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☒ Middle of water column Other: middle of screened interval

PUMP SET ~13'

PURGE VOLUME CALCULATIONS

Depth in feet (BTOC) _____

(_____ - _____) X _____ ^{2} X 3 X 0.0408 = _____ Gallons

TD (feet) WL (feet) D (inches) No. Volumes Calculated Purge Volume

FIELD PARAMETER MEASUREMENT

Time	Minutes Elapsed	Rate (mL/ min)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTUs)	DO (mg/L)	Temp. (°C)	ORP (mV)	Depth to Water (ft t.o.c.)	Comments
1145	0									10.57'	
1148	3	600	1.50	8.18	3.96	351.0	.27	15.74	-160	11.50'	
1151	6	600	1.00	8.26	5.21	158.0	0.0	15.72	-161	11.53'	
1154	9	500	~1.50	8.25	3.00	85.6	0.0	15.71	-161	11.33'	
1157	12	500	~2.00	8.32	2.94	16.7	0.0	15.72	-162	11.23'	
1200	15	500	~2.50	8.27	2.92	24.4	0.0	15.94	-165	11.22'	
1203	18	500	~3.0	8.31	2.74	3.3	0.0	15.92	-161	11.27'	
1206	21	500	~3.5	8.32	2.69	1.4	0.0	15.92	-161	11.29'	
1209	24	500								11.30'	SAMPLE
1212	27										
1215	30										
										11.29'	PUMP OFF @ 1219
											3-40 mL VOAs w/ HCl
											3 1L Ambers unpreserved

Note: GT = Greater Than. LT = Less Than.
NM = Not Measured. NC = Not Collected.

OBSERVATIONS DURING WELL PURGING: Well Condition: OK Color: Gray/Black

Turbidity (Qualitative): Mod Odor: Mild Other: _____

Purge Water Disposal: ☐ San. Sewer ☐ Storm Sewer ☒ Drum: Type 35-gal Carbon Size ____ Other ground surface

dw separator sump

APPENDIX E

LABORATORY ANALYSIS REPORTS

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S1

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-7

Sample wt/vol: 30.03 (g/mL) g Lab File ID: H1518

% Moisture: 6 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S1D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-8

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1519

% Moisture: 13 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 2

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-1

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1512

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 2D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-2

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1513

% Moisture: 59 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	1600	U
11104-28-2	Aroclor-1221	1600	U
11141-16-5	Aroclor-1232	1600	U
53469-21-9	Aroclor-1242	1600	U
12672-29-6	Aroclor-1248	1600	U
11097-69-1	Aroclor-1254	1600	U
11096-82-5	Aroclor-1260	1600	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 3

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-3

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1514

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
12674-11-2	Aroclor-1016		34	U
11104-28-2	Aroclor-1221		34	U
11141-16-5	Aroclor-1232		34	U
53469-21-9	Aroclor-1242		34	U
12672-29-6	Aroclor-1248		34	U
11097-69-1	Aroclor-1254		34	U
11096-82-5	Aroclor-1260		34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S3D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-4

Sample wt/vol: 30.01 (g/mL) g Lab File ID: H1515

% Moisture: 29 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	940	U
11104-28-2	Aroclor-1221	940	U
11141-16-5	Aroclor-1232	940	U
53469-21-9	Aroclor-1242	940	U
12672-29-6	Aroclor-1248	940	U
11097-69-1	Aroclor-1254	940	U
11096-82-5	Aroclor-1260	940	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S4

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-5

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1516

% Moisture: 3 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S4D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-6

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1517

% Moisture: 7 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 5

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-13

Sample wt/vol: 30.11 (g/mL) g Lab File ID: H1480

% Moisture: 3 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S5D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-14

Sample wt/vol: 30.05 (g/mL) g Lab File ID: H1481

% Moisture: 30 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	950	U
11104-28-2	Aroclor-1221	950	U
11141-16-5	Aroclor-1232	950	U
53469-21-9	Aroclor-1242	950	U
12672-29-6	Aroclor-1248	950	U
11097-69-1	Aroclor-1254	950	U
11096-82-5	Aroclor-1260	950	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S6

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 1585-15

Sample wt/vol: 30.11 (g/mL) g Lab File ID: H1482

% Moisture: 4 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S6 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-16

Sample wt/vol: 30.13 (g/mL) g Lab File ID: H1483

% Moisture: 29 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	930	U
11104-28-2	Aroclor-1221	930	U
11141-16-5	Aroclor-1232	930	U
53469-21-9	Aroclor-1242	930	U
12672-29-6	Aroclor-1248	930	U
11097-69-1	Aroclor-1254	930	U
11096-82-5	Aroclor-1260	930	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 1

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-11

Sample wt/vol: 30.01 (g/mL) g Lab File ID: H1478

% Moisture: 50 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/05/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	67	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	67	U
53469-21-9	Aroclor-1242	67	U
12672-29-6	Aroclor-1248	67	U
11097-69-1	Aroclor-1254	67	U
11096-82-5	Aroclor-1260	67	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 7 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-12

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1479

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/05/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	680	U
11104-28-2	Aroclor-1221	680	U
11141-16-5	Aroclor-1232	680	U
53469-21-9	Aroclor-1242	680	U
12672-29-6	Aroclor-1248	680	U
11097-69-1	Aroclor-1254	680	U
11096-82-5	Aroclor-1260	680	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S8

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-9

Sample wt/vol: 30.00 (g/mL) g Lab File ID: G1708

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 8 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-10

Sample wt/vol: 30.00 (g/mL) g Lab File ID: G1709

% Moisture: 30 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID. S-8D

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 1916-5

Sample wt/vol: 30.00 (g/mL) g Lab File ID: G2262

% Moisture: 30 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/27/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
37324-23-5	Aroclor-1262	48	U
11100-14-4	Aroclor-1268	48	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 9

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-7

Sample wt/vol: 30.10 (g/mL) g Lab File ID: G1706

% Moisture: 1 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D
PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

5-9

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1916-3

Sample wt/vol: 30.10 (g/mL) g Lab File ID: G2260

% Moisture: 1 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/27/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
12674-11-2	Aroclor-1016		34	U
11104-28-2	Aroclor-1221		34	U
11141-16-5	Aroclor-1232		34	U
53469-21-9	Aroclor-1242		34	U
12672-29-6	Aroclor-1248		34	U
11097-69-1	Aroclor-1254		34	U
11096-82-5	Aroclor-1260		34	U
37324-23-5	Aroclor-1262		34	U
11100-14-4	Aroclor-1268		34	U

N/A = Not Applicable
U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S9D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-8

Sample wt/vol: 30.03 (g/mL) g Lab File ID: G1707

% Moisture: 45 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	61	U
11104-28-2	Aroclor-1221	61	U
11141-16-5	Aroclor-1232	61	U
53469-21-9	Aroclor-1242	61	U
12672-29-6	Aroclor-1248	61	U
11097-69-1	Aroclor-1254	61	U
11096-82-5	Aroclor-1260	61	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S-9D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1916-4

Sample wt/vol: 30.03 (g/mL) g Lab File ID: G2261

% Moisture: 45 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/27/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	61	U
11104-28-2	Aroclor-1221	61	U
11141-16-5	Aroclor-1232	61	U
53469-21-9	Aroclor-1242	61	U
12672-29-6	Aroclor-1248	61	U
11097-69-1	Aroclor-1254	61	U
11096-82-5	Aroclor-1260	61	U
37324-23-5	Aroclor-1262	61	U
11100-14-4	Aroclor-1268	860	

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S10

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-29

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1508

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
12674-11-2	Aroclor-1016		34	U
11104-28-2	Aroclor-1221		34	U
11141-16-5	Aroclor-1232		34	U
53469-21-9	Aroclor-1242		34	U
12672-29-6	Aroclor-1248		34	U
11097-69-1	Aroclor-1254		34	U
11096-82-5	Aroclor-1260		34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S10D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-30

Sample wt/vol: 30.12 (g/mL) g Lab File ID: H1509

% Moisture: 34 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor-1242	1000	U
12672-29-6	Aroclor-1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	1000	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 11

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-31

Sample wt/vol: 30.05 (g/mL) g Lab File ID: H1510

% Moisture: 1 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S11 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-32

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1511

% Moisture: 25 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	890	U
11104-28-2	Aroclor-1221	890	U
11141-16-5	Aroclor-1232	890	U
53469-21-9	Aroclor-1242	890	U
12672-29-6	Aroclor-1248	890	U
11097-69-1	Aroclor-1254	890	U
11096-82-5	Aroclor-1260	890	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S12

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-5

Sample wt/vol: 30.09 (g/mL) g Lab File ID: G1704

% Moisture: 1 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

512D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-6

Sample wt/vol: 30.09 (g/mL) g Lab File ID: G1705

% Moisture: 24 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	44	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

5-12D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1916-2

Sample wt/vol: 30.09 (g/mL) g Lab File ID: G2259

% Moisture: 24 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/27/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	44	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U
37324-23-5	Aroclor-1262	44	U
11100-14-4	Aroclor-1268	44	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S-13 (3')

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-1

Sample wt/vol: 30.02 (g/mL) g Lab File ID: G1700

% Moisture: 1 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S13D(10')

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-3

Sample wt/vol: 30.03 (g/mL) g Lab File ID: G1702

% Moisture: 27 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	46	U
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S14 (3')

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-2

Sample wt/vol: 30.13 (g/mL) g Lab File ID: G1701

% Moisture: 2 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

FORM I PEST
PCB

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1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S14D (10')

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-4

Sample wt/vol: 30.03 (g/mL) g Lab File ID: G1703

% Moisture: 36 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

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3/90

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S-14 B(10')

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 1916-1

Sample wt/vol: 30.03 (g/mL) g Lab File ID: G2258

% Moisture: 36 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/03/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/27/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID. 5-15

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-11

Sample wt/vol: 30.08 (g/mL) g Lab File ID: G1769

% Moisture: 27 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/05/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/08/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	46	U
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

5150 S12

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-12 ✓

Sample wt/vol: 30.04 (g/mL) g Lab File ID: H1548

% Moisture: 18 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/05/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 16

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-27

Sample wt/vol: 30.00 (g/mL) g Lab File ID: H1506

% Moisture: 24 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
12674-11-2	Aroclor-1016		44	U
11104-28-2	Aroclor-1221		44	U
11141-16-5	Aroclor-1232		44	U
53469-21-9	Aroclor-1242		44	U
12672-29-6	Aroclor-1248		44	U
11097-69-1	Aroclor-1254		44	U
11096-82-5	Aroclor-1260		44	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

NOTE: Other aroclors may be present;however, no pattern match can be made.

FORM I PEST

PCB

3/90

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S16 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-28

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1507

% Moisture: 57 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
12674-11-2	Aroclor-1016		1500	U
11104-28-2	Aroclor-1221		1500	U
11141-16-5	Aroclor-1232		1500	U
53469-21-9	Aroclor-1242		1500	U
12672-29-6	Aroclor-1248		1500	U
11097-69-1	Aroclor-1254		1500	U
11096-82-5	Aroclor-1260		1500	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S17

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-25

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1488

% Moisture: 5 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S17D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-26

Sample wt/vol: 30.11 (g/mL) g Lab File ID: H1489

% Moisture: 35 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor-1242	1000	U
12672-29-6	Aroclor-1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	1000	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID. S18

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-23

Sample wt/vol: 30.02 (g/mL) g Lab File ID: H1539

% Moisture: 7 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 10

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	360	U
11104-28-2	Aroclor-1221	360	U
11141-16-5	Aroclor-1232	360	U
53469-21-9	Aroclor-1242	3100	
12672-29-6	Aroclor-1248	360	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID. S18D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-24

Sample wt/vol: 30.03 (g/mL) g Lab File ID: H1540

% Moisture: 7 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/07/05

Injection Volume: 1 (uL) Dilution Factor: 100

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	3600	U
11104-28-2	Aroclor-1221	3600	U
11141-16-5	Aroclor-1232	3600	U
53469-21-9	Aroclor-1242	33000	
12672-29-6	Aroclor-1248	3600	U
11097-69-1	Aroclor-1254	3600	U
11096-82-5	Aroclor-1260	3600	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

819

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-17

Sample wt/vol: 30.01 (g/mL) g Lab File ID: H1484

% Moisture: 7 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S19D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1585-18

Sample wt/vol: 30.04 (g/mL) g Lab File ID: H1485

% Moisture: 22 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/04/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	850	U
11104-28-2	Aroclor-1221	850	U
11141-16-5	Aroclor-1232	850	U
53469-21-9	Aroclor-1242	850	U
12672-29-6	Aroclor-1248	850	U
11097-69-1	Aroclor-1254	850	U
11096-82-5	Aroclor-1260	850	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

FORM I PEST

PCB

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1D
PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

S 20

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-9

Sample wt/vol: 30.09 (g/mL) g Lab File ID: H1520

% Moisture: 11 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/05/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/06/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

N/A = Not Applicable
U= Not detected

*Results Reported on a -- Dry Weight Basis

FORM I PEST
PCB

3/90

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID. S 20 D

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Soil Lab Sample ID: 1604-10

Sample wt/vol: 30.07 (g/mL) g Lab File ID: H1604

% Moisture: 36 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 05/05/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/10/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

H_2SO_4 Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U

N/A = Not Applicable

U= Not detected

*Results Reported on a -- Dry Weight Basis

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-1 SB-1
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0001**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4706.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 20:14:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30 G
% Moisture:	5	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	35		U
11104-28-2	Aroclor-1221	35		U
11141-16-5	Aroclor-1232	35		U
53469-21-9	Aroclor-1242	35		U
12672-29-6	Aroclor-1248	35		U
11097-69-1	Aroclor-1254	35		U
11096-82-5	Aroclor-1260	35		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-2 SB-1D
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0002**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4707.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 20:48:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30 G
% Moisture:	10	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	37		U
11104-28-2	Aroclor-1221	37		U
11141-16-5	Aroclor-1232	37		U
53469-21-9	Aroclor-1242	37		U
12672-29-6	Aroclor-1248	37		U
11097-69-1	Aroclor-1254	37		U
11096-82-5	Aroclor-1260	37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-3 SB-2
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0003**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4708.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 21:21:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30 G
% Moisture:	16	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	40		U
11104-28-2	Aroclor-1221	40		U
11141-16-5	Aroclor-1232	40		U
53469-21-9	Aroclor-1242	40		U
12672-29-6	Aroclor-1248	40		U
11097-69-1	Aroclor-1254	40		U
11096-82-5	Aroclor-1260	40		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-4 SB-2 S
Lab Name:	EMSL Analytical		
EMSL Sample ID:	010504274-0004	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4709.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 21:55:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.01 G
% Moisture:	13	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	38		U
11104-28-2	Aroclor-1221	38		U
11141-16-5	Aroclor-1232	38		U
53469-21-9	Aroclor-1242	38		U
12672-29-6	Aroclor-1248	38		U
11097-69-1	Aroclor-1254	38		U
11096-82-5	Aroclor-1260	38		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-5 SB-3
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0005**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4710.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 22:29:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.01 G
% Moisture:	7	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	180	2900	D1
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36		U
11096-82-5	Aroclor-1260	36	49	

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D1= Primary Column: G4747.D (Analysis Time: 10/27/05 23:16:00 , Dil. Factor= 5)
Confirm Column: G4747.D (Analysis Time: 10/27/05 23:16:00

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-6 SB-3 D
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0006**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4711.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 23:02:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.01 G
% Moisture:	7	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	360	7800	D1
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36		U
11096-82-5	Aroclor-1260	36	140	

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D1= Primary Column: G4748.D (Analysis Time: 10/27/05 23:50:00 , Dil. Factor= 10)
Confirm Column: G4748.D (Analysis Time: 10/27/05 23:50:00

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-7 SB4
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0007**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4712.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/26/05 23:36:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30 G
% Moisture:	7	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	36		U
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36		U
11096-82-5	Aroclor-1260	36		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-8 SB 4 S
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0008**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4713.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/27/05 00:09:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30 G
% Moisture:	7	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	36		U
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36		U
11096-82-5	Aroclor-1260	36		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-9 SB-5
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0009**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4714.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/27/05 00:43:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.02 G
% Moisture:	8	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	36		U
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36	22	J
11096-82-5	Aroclor-1260	36		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	4274-10 SB-5D
Lab Name:	EMSL Analytical		
EMSL Sample ID:	**010504274-0010**	**Project:**	SB-1 thru 5(soil PCB)
Lab File ID:	G4715.D	**Sample Matrix:**	Soils
Instrument ID:	G	**Sampling Date:**	10/24/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/27/05 01:17:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.01 G
% Moisture:	13	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	38		U
11104-28-2	Aroclor-1221	38		U
11141-16-5	Aroclor-1232	38		U
53469-21-9	Aroclor-1242	38		U
12672-29-6	Aroclor-1248	38		U
11097-69-1	Aroclor-1254	38		U
11096-82-5	Aroclor-1260	38		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-6-3
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0001	**Project:**	United Hangar 14
Lab File ID:	H4433.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 02:17:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.09 G
% Moisture:	8	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	36		U
11104-28-2	Aroclor-1221	36		U
11141-16-5	Aroclor-1232	36		U
53469-21-9	Aroclor-1242	36		U
12672-29-6	Aroclor-1248	36		U
11097-69-1	Aroclor-1254	36		U
11096-82-5	Aroclor-1260	36		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-6-8
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0002	Project:	United Hangar 14
Lab File ID:	H4434.D	Sample Matrix:	Soils
Instrument ID:	HP-H	Sampling Date:	11/16/05
Analyst:	TR	Date Extracted:	11/22/05
GC Column:	CLPest I (0.32 mm)	Analysis Date	11/24/05 02:53:00
GC Column 2:	CLPest II (0.32 mm)	Sample wt/vol:	30.09 G
% Moisture:	20	Dilution Factor:	1
PH:		Concentrated Extract Vol:	10 (ml)
GPC Cleanup(Y/N):	N	Injection Volume:	1 (ul)
Extraction Type:	Sonc	Sulfur Cleanup:	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	42		U
11104-28-2	Aroclor-1221	42		U
11141-16-5	Aroclor-1232	42		U
53469-21-9	Aroclor-1242	42		U
12672-29-6	Aroclor-1248	42	180	
11097-69-1	Aroclor-1254	42		U
11096-82-5	Aroclor-1260	42		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-7-3
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0003	**Project:**	United Hangar 14
Lab File ID:	H4442.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 07:37:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.07 G
% Moisture:	15	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	39		U
11104-28-2	Aroclor-1221	39		U
11141-16-5	Aroclor-1232	39		U
53469-21-9	Aroclor-1242	39		U
12672-29-6	Aroclor-1248	39		U
11097-69-1	Aroclor-1254	39		U
11096-82-5	Aroclor-1260	39		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-7-9
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0004	**Project:**	United Hangar 14
Lab File ID:	H4443.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 08:12:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.14 G
% Moisture:	11	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	37		U
11104-28-2	Aroclor-1221	37		U
11141-16-5	Aroclor-1232	37		U
53469-21-9	Aroclor-1242	37		U
12672-29-6	Aroclor-1248	37		U
11097-69-1	Aroclor-1254	37		U
11096-82-5	Aroclor-1260	37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-8-3
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0005	**Project:**	United Hangar 14
Lab File ID:	H4444.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 08:48:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.06 G
% Moisture:	15	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	39		U
11104-28-2	Aroclor-1221	39		U
11141-16-5	Aroclor-1232	39		U
53469-21-9	Aroclor-1242	39		U
12672-29-6	Aroclor-1248	39		U
11097-69-1	Aroclor-1254	39		U
11096-82-5	Aroclor-1260	39		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-8-8
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0006	**Project:**	United Hangar 14
Lab File ID:	H4445.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 09:23:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.12 G
% Moisture:	12	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	38		U
11104-28-2	Aroclor-1221	38		U
11141-16-5	Aroclor-1232	38		U
53469-21-9	Aroclor-1242	38		U
12672-29-6	Aroclor-1248	38		U
11097-69-1	Aroclor-1254	38		U
11096-82-5	Aroclor-1260	38		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-9-3
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0007	**Project:**	United Hangar 14
Lab File ID:	H4446.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 09:59:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.17 G
% Moisture:	4	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	35		U
11104-28-2	Aroclor-1221	35		U
11141-16-5	Aroclor-1232	35		U
53469-21-9	Aroclor-1242	35		U
12672-29-6	Aroclor-1248	35		U
11097-69-1	Aroclor-1254	35		U
11096-82-5	Aroclor-1260	35		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	SB-9-8
Lab Name:	EMSL Anaytical Inc		
EMSL Sample ID:	010504838-0008	**Project:**	United Hangar 14
Lab File ID:	H4447.D	**Sample Matrix:**	Soils
Instrument ID:	HP-H	**Sampling Date:**	11/16/05
Analyst:	TR	**Date Extracted:**	11/22/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	11/24/05 10:34:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	30.1 G
% Moisture:	15	**Dilution Factor:**	1
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	Sonc	**Sulfur Cleanup:**	Y
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
12674-11-2	Aroclor-1016	39		U
11104-28-2	Aroclor-1221	39		U
11141-16-5	Aroclor-1232	39		U
53469-21-9	Aroclor-1242	39		U
12672-29-6	Aroclor-1248	39		U
11097-69-1	Aroclor-1254	39		U
11096-82-5	Aroclor-1260	39		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0031**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03018.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	510		U
74-87-3	Chloromethane	510		U
75-01-4	Vinyl chloride	510		U
74-83-9	Bromomethane	510		U
75-00-3	Chloroethane	510		U
75-69-4	Trichlorofluoromethane	510		U
75-35-4	1,1-Dichloroethene	250		U
67-64-1	Acetone	510		U
75-15-0	Carbon disulfide	250		U
75-09-2	Methylene chloride	250		U
156-60-5	trans-1,2-Dichloroethene	250		U
1634-04-4	Methyl-tert butyl ether	250		U
75-34-3	1,1-Dichloroethane	250		U
594-20-7	2,2-Dichloropropane	250		U
156-59-2	cis-1,2-Dichloroethene	250		U
78-93-3	2-Butanone	510		U
74-97-1	Bromochloromethane	250		U
67-66-3	Chloroform	250		U
71-55-6	1,1,1-Trichloroethane	250		U
56-23-1	Carbon tetrachloride	250		U
563-58-6	1,1-Dichloropropene	250		U
71-43-2	Benzene	250		U
107-06-2	1,2-Dichloroethane	250		U
79-01-6	Trichloroethene	250		U
78-87-1	1,2-Dichloropropane	250		U
74-95-3	Dibromomethane	250		U
75-27-4	Bromodichloromethane	250		U
10061-01-1	cis-1,3-Dichloropropene	250		U
108-10-1	4-Methyl-2-pentanone	510		U
108-88-3	Toluene	250		U
10061-02-6	trans-1,3-Dichloropropene	250		U
79-00-1	1,1,2-Trichloroethane	250		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0031**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03018.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	250		U
142-28-9	1,3-Dichloropropane	250		U
591-78-6	2-Hexanone	510		U
124-48-1	Dibromochloromethane	250		U
106-93-4	1,2-Dibromoethane	250		U
108-90-7	Chlorobenzene	250		U
630-20-6	1,1,1,2-Tetrachloroethane	250		U
100-41-4	Ethylbenzene	250		U
108-38-3	Xylene (para & meta)	250		U
95-47-6	Xylene (Ortho)	250		U
100-42-1	Styrene	250		U
75-25-2	Bromoform	250		U
98-82-8	Isopropylbenzene	250		U
108-86-1	Bromobenzene	250		U
79-34-1	1,1,2,2-Tetrachloroethane	250		U
96-18-4	1,2,3-Trichloropropane	250		U
103-65-1	n-Propylbenzene	250		U
110-57-6	trans-1,4-Dichloro-2-butene	250		U
95-49-8	2-Chlorotoluene	250		U
106-43-4	4-Chlorotoluene	250		U
108-67-8	1,3,5-Trimethylbenzene	250		U
98-06-6	tert-Butylbenzene	250		U
95-63-6	1,2,4-Trimethylbenzene	250		U
135-98-8	sec-Butylbenzene	250		U
541-73-1	1,3-Dichlorobenzene	250		U
99-87-6	4-Isopropyltoluene	250		U
106-46-7	1,4-Dichlorobenzene	250		U
95-50-1	1,2-Dichlorobenzene	250		U
'04-51-8	n-Butylbenzene	250		U
ơ7-72-1	Hexachloroethane	250		U
96-12-8	1,2-Dibromo-3-chloropropane	250		U
120-82-1	1,2,4-Trichlorobenzene	250		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0031**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03018.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	250		U
91-20-3	Naphthalene	250		U
87-61-6	1,2,3-Trichlorobenzene	250		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 D
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0032**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03019.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 22:24:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	25

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	670		U
74-87-3	Chloromethane	670		U
75-01-4	Vinyl chloride	670		U
74-83-9	Bromomethane	670		U
75-00-3	Chloroethane	670		U
75-69-4	Trichlorofluoromethane	670		U
75-35-4	1,1-Dichloroethene	330		U
67-64-1	Acetone	670		U
75-15-0	Carbon disulfide	330		U
75-09-2	Methylene chloride	330		U
156-60-5	trans-1,2-Dichloroethene	330		U
1634-04-4	Methyl-tert butyl ether	330		U
75-34-3	1,1-Dichloroethane	330		U
594-20-7	2,2-Dichloropropane	330		U
156-59-2	cis-1,2-Dichloroethene	330		U
78-93-3	2-Butanone	670		U
74-97-1	Bromochloromethane	330		U
67-66-3	Chloroform	330		U
71-55-6	1,1,1-Trichloroethane	330		U
56-23-1	Carbon tetrachloride	330		U
563-58-6	1,1-Dichloropropene	330		U
71-43-2	Benzene	330		U
107-06-2	1,2-Dichloroethane	330		U
79-01-6	Trichloroethene	330	360	
78-87-1	1,2-Dichloropropane	330		U
74-95-3	Dibromomethane	330		U
75-27-4	Bromodichloromethane	330		U
10061-01-1	cis-1,3-Dichloropropene	330		U
08-10-1	4-Methyl-2-pentanone	670		U
108-88-3	Toluene	330		U
10061-02-6	trans-1,3-Dichloropropene	330		U
79-00-1	1,1,2-Trichloroethane	330		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 D
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0032**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03019.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 22:24:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	25

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	330		U
142-28-9	1,3-Dichloropropane	330		U
591-78-6	2-Hexanone	670		U
124-48-1	Dibromochloromethane	330		U
106-93-4	1,2-Dibromoethane	330		U
108-90-7	Chlorobenzene	330		U
630-20-6	1,1,1,2-Tetrachloroethane	330		U
100-41-4	Ethylbenzene	330		U
108-38-3	Xylene (para & meta)	330		U
95-47-6	Xylene (Ortho)	330		U
100-42-1	Styrene	330		U
75-25-2	Bromoform	330		U
98-82-8	Isopropylbenzene	330		U
108-86-1	Bromobenzene	330		U
79-34-1	1,1,2,2-Tetrachloroethane	330		U
96-18-4	1,2,3-Trichloropropane	330		U
103-65-1	n-Propylbenzene	330		U
110-57-6	trans-1,4-Dichloro-2-butene	330		U
95-49-8	2-Chlorotoluene	330		U
106-43-4	4-Chlorotoluene	330		U
108-67-8	1,3,5-Trimethylbenzene	330		U
98-06-6	tert-Butylbenzene	330		U
95-63-6	1,2,4-Trimethylbenzene	330		U
135-98-8	sec-Butylbenzene	330		U
541-73-1	1,3-Dichlorobenzene	330		U
99-87-6	4-Isopropyltoluene	330		U
106-46-7	1,4-Dichlorobenzene	330		U
95-50-1	1,2-Dichlorobenzene	330		U
04-51-8	n-Butylbenzene	330		U
67-72-1	Hexachloroethane	330		U
96-12-8	1,2-Dibromo-3-chloropropane	330		U
120-82-1	1,2,4-Trichlorobenzene	330		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S11 D
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0032**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03019.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 22:24:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	25

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	330		U
91-20-3	Naphthalene	330		U
87-61-6	1,2,3-Trichlorobenzene	330		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0001**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02964.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 20:54:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	510		U
74-87-3	Chloromethane	510		U
75-01-4	Vinyl chloride	510		U
74-83-9	Bromomethane	510		U
75-00-3	Chloroethane	510		U
75-69-4	Trichlorofluoromethane	510		U
75-35-4	1,1-Dichloroethene	250		U
67-64-1	Acetone	510		U
75-15-0	Carbon disulfide	250		U
75-09-2	Methylene chloride	250		U
156-60-5	trans-1,2-Dichloroethene	250		U
1634-04-4	Methyl-tert butyl ether	250		U
75-34-3	1,1-Dichloroethane	250		U
594-20-7	2,2-Dichloropropane	250		U
156-59-2	cis-1,2-Dichloroethene	250		U
78-93-3	2-Butanone	510		U
74-97-1	Bromochloromethane	250		U
67-66-3	Chloroform	250		U
71-55-6	1,1,1-Trichloroethane	250		U
56-23-1	Carbon tetrachloride	250		U
563-58-6	1,1-Dichloropropene	250		U
71-43-2	Benzene	250		U
107-06-2	1,2-Dichloroethane	250		U
79-01-6	Trichloroethene	250		U
78-87-1	1,2-Dichloropropane	250		U
74-95-3	Dibromomethane	250		U
75-27-4	Bromodichloromethane	250		U
10061-01-1	cis-1,3-Dichloropropene	250		U
108-10-1	4-Methyl-2-pentanone	510		U
108-88-3	Toluene	250		U
10061-02-6	trans-1,3-Dichloropropene	250		U
79-00-1	1,1,2-Trichloroethane	250		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0001**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02964.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 20:54:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	250		U
142-28-9	1,3-Dichloropropane	250		U
591-78-6	2-Hexanone	510		U
124-48-1	Dibromochloromethane	250		U
106-93-4	1,2-Dibromoethane	250		U
108-90-7	Chlorobenzene	250		U
630-20-6	1,1,1,2-Tetrachloroethane	250		U
100-41-4	Ethylbenzene	250		U
108-38-3	Xylene (para & meta)	250		U
95-47-6	Xylene (Ortho)	250		U
100-42-1	Styrene	250		U
75-25-2	Bromoform	250		U
98-82-8	Isopropylbenzene	250		U
108-86-1	Bromobenzene	250		U
79-34-1	1,1,2,2-Tetrachloroethane	250		U
96-18-4	1,2,3-Trichloropropane	250		U
103-65-1	n-Propylbenzene	250		U
110-57-6	trans-1,4-Dichloro-2-butene	250		U
95-49-8	2-Chlorotoluene	250		U
106-43-4	4-Chlorotoluene	250		U
108-67-8	1,3,5-Trimethylbenzene	250		U
98-06-6	tert-Butylbenzene	250		U
95-63-6	1,2,4-Trimethylbenzene	250		U
135-98-8	sec-Butylbenzene	250		U
541-73-1	1,3-Dichlorobenzene	250		U
99-87-6	4-Isopropyltoluene	250		U
106-46-7	1,4-Dichlorobenzene	250		U
95-50-1	1,2-Dichlorobenzene	250		U
'04-51-8	n-Butylbenzene	250		U
67-72-1	Hexachloroethane	250		U
96-12-8	1,2-Dibromo-3-chloropropane	250		U
120-82-1	1,2,4-Trichlorobenzene	250		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0001**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02964.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 20:54:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	1

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	250		U
91-20-3	Naphthalene	250		U
87-61-6	1,2,3-Trichlorobenzene	250		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0003**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02966.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 22:23:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	27

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	680		U
74-87-3	Chloromethane	680		U
75-01-4	Vinyl chloride	680		U
74-83-9	Bromomethane	680		U
75-00-3	Chloroethane	680		U
75-69-4	Trichlorofluoromethane	680		U
75-35-4	1,1-Dichloroethene	340		U
67-64-1	Acetone	680		U
75-15-0	Carbon disulfide	340		U
75-09-2	Methylene chloride	340		U
156-60-5	trans-1,2-Dichloroethene	340		U
1634-04-4	Methyl-tert butyl ether	340		U
75-34-3	1,1-Dichloroethane	340		U
594-20-7	2,2-Dichloropropane	340		U
156-59-2	cis-1,2-Dichloroethene	340		U
78-93-3	2-Butanone	680		U
74-97-1	Bromochloromethane	340		U
67-66-3	Chloroform	340		U
71-55-6	1,1,1-Trichloroethane	340		U
56-23-1	Carbon tetrachloride	340		U
563-58-6	1,1-Dichloropropene	340		U
71-43-2	Benzene	340		U
107-06-2	1,2-Dichloroethane	340		U
79-01-6	Trichloroethene	340		U
78-87-1	1,2-Dichloropropane	340		U
74-95-3	Dibromomethane	340		U
75-27-4	Bromodichloromethane	340		U
10061-01-1	cis-1,3-Dichloropropene	340		U
08-10-1	4-Methyl-2-pentanone	680		U
108-88-3	Toluene	340		U
10061-02-6	trans-1,3-Dichloropropene	340		U
79-00-1	1,1,2-Trichloroethane	340		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0003**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02966.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 22:23:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	27

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	340		U
142-28-9	1,3-Dichloropropane	340		U
591-78-6	2-Hexanone	680		U
124-48-1	Dibromochloromethane	340		U
106-93-4	1,2-Dibromoethane	340		U
108-90-7	Chlorobenzene	340		U
630-20-6	1,1,1,2-Tetrachloroethane	340		U
100-41-4	Ethylbenzene	340		U
108-38-3	Xylene (para & meta)	340		U
95-47-6	Xylene (Ortho)	340		U
100-42-1	Styrene	340		U
75-25-2	Bromoform	340		U
98-82-8	Isopropylbenzene	340		U
108-86-1	Bromobenzene	340		U
79-34-1	1,1,2,2-Tetrachloroethane	340		U
96-18-4	1,2,3-Trichloropropane	340		U
103-65-1	n-Propylbenzene	340		U
110-57-6	trans-1,4-Dichloro-2-butene	340		U
95-49-8	2-Chlorotoluene	340		U
106-43-4	4-Chlorotoluene	340		U
108-67-8	1,3,5-Trimethylbenzene	340		U
98-06-6	tert-Butylbenzene	340		U
95-63-6	1,2,4-Trimethylbenzene	340		U
135-98-8	sec-Butylbenzene	340		U
541-73-1	1,3-Dichlorobenzene	340		U
99-87-6	4-Isopropyltoluene	340		U
106-46-7	1,4-Dichlorobenzene	340		U
95-50-1	1,2-Dichlorobenzene	340		U
04-51-8	n-Butylbenzene	340		U
67-72-1	Hexachloroethane	340		U
96-12-8	1,2-Dibromo-3-chloropropane	340		U
120-82-1	1,2,4-Trichlorobenzene	340		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	13D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0003**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02966.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 22:23:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	27

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	340		U
91-20-3	Naphthalene	340		U
87-61-6	1,2,3-Trichlorobenzene	340		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0002**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02965.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	2

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	510		U
74-87-3	Chloromethane	510		U
75-01-4	Vinyl chloride	510		U
74-83-9	Bromomethane	510		U
75-00-3	Chloroethane	510		U
75-69-4	Trichlorofluoromethane	510		U
75-35-4	1,1-Dichloroethene	260		U
67-64-1	Acetone	510		U
75-15-0	Carbon disulfide	260		U
75-09-2	Methylene chloride	260		U
156-60-5	trans-1,2-Dichloroethene	260		U
1634-04-4	Methyl-tert butyl ether	260		U
75-34-3	1,1-Dichloroethane	260		U
594-20-7	2,2-Dichloropropane	260		U
156-59-2	cis-1,2-Dichloroethene	260		U
78-93-3	2-Butanone	510		U
74-97-1	Bromochloromethane	260		U
67-66-3	Chloroform	260		U
71-55-6	1,1,1-Trichloroethane	260		U
56-23-1	Carbon tetrachloride	260		U
563-58-6	1,1-Dichloropropene	260		U
71-43-2	Benzene	260		U
107-06-2	1,2-Dichloroethane	260		U
79-01-6	Trichloroethene	260		U
78-87-1	1,2-Dichloropropane	260		U
74-95-3	Dibromomethane	260		U
75-27-4	Bromodichloromethane	260		U
10061-01-1	cis-1,3-Dichloropropene	260		U
108-10-1	4-Methyl-2-pentanone	510		U
108-88-3	Toluene	260		U
10061-02-6	trans-1,3-Dichloropropene	260		U
79-00-1	1,1,2-Trichloroethane	260		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0002**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02965.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	2

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	260		U
142-28-9	1,3-Dichloropropane	260		U
591-78-6	2-Hexanone	510		U
124-48-1	Dibromochloromethane	260		U
106-93-4	1,2-Dibromoethane	260		U
108-90-7	Chlorobenzene	260		U
630-20-6	1,1,1,2-Tetrachloroethane	260		U
100-41-4	Ethylbenzene	260		U
108-38-3	Xylene (para & meta)	260		U
95-47-6	Xylene (Ortho)	260		U
100-42-1	Styrene	260		U
75-25-2	Bromoform	260		U
98-82-8	Isopropylbenzene	260		U
108-86-1	Bromobenzene	260		U
79-34-1	1,1,2,2-Tetrachloroethane	260		U
96-18-4	1,2,3-Trichloropropane	260		U
103-65-1	n-Propylbenzene	260		U
110-57-6	trans-1,4-Dichloro-2-butene	260		U
95-49-8	2-Chlorotoluene	260		U
106-43-4	4-Chlorotoluene	260		U
108-67-8	1,3,5-Trimethylbenzene	260		U
98-06-6	tert-Butylbenzene	260		U
95-63-6	1,2,4-Trimethylbenzene	260		U
135-98-8	sec-Butylbenzene	260		U
541-73-1	1,3-Dichlorobenzene	260		U
99-87-6	4-Isopropyltoluene	260		U
106-46-7	1,4-Dichlorobenzene	260		U
95-50-1	1,2-Dichlorobenzene	260		U
104-51-8	n-Butylbenzene	260		U
67-72-1	Hexachloroethane	260		U
96-12-8	1,2-Dibromo-3-chloropropane	260		U
120-82-1	1,2,4-Trichlorobenzene	260		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14 PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0002**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02965.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 21:39:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	2

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	260		U
91-20-3	Naphthalene	260		U
87-61-6	1,2,3-Trichlorobenzene	260		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0004**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02967.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	8.03 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	36

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	970		U
74-87-3	Chloromethane	970		U
75-01-4	Vinyl chloride	970		U
74-83-9	Bromomethane	970		U
75-00-3	Chloroethane	970		U
75-69-4	Trichlorofluoromethane	970		U
75-35-4	1,1-Dichloroethene	490		U
67-64-1	Acetone	970		U
75-15-0	Carbon disulfide	490		U
75-09-2	Methylene chloride	490		U
156-60-5	trans-1,2-Dichloroethene	490		U
1634-04-4	Methyl-tert butyl ether	490		U
75-34-3	1,1-Dichloroethane	490		U
594-20-7	2,2-Dichloropropane	490		U
156-59-2	cis-1,2-Dichloroethene	490		U
78-93-3	2-Butanone	970		U
74-97-1	Bromochloromethane	490		U
67-66-3	Chloroform	490		U
71-55-6	1,1,1-Trichloroethane	490		U
56-23-1	Carbon tetrachloride	490		U
563-58-6	1,1-Dichloropropene	490		U
71-43-2	Benzene	490		U
107-06-2	1,2-Dichloroethane	490		U
79-01-6	Trichloroethene	490		U
78-87-1	1,2-Dichloropropane	490		U
74-95-3	Dibromomethane	490		U
75-27-4	Bromodichloromethane	490		U
10061-01-1	cis-1,3-Dichloropropene	490		U
08-10-1	4-Methyl-2-pentanone	970		U
108-88-3	Toluene	490		U
10061-02-6	trans-1,3-Dichloropropene	490		U
79-00-1	1,1,2-Trichloroethane	490		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0004**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02967.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	8.03 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	36

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	490		U
142-28-9	1,3-Dichloropropane	490		U
591-78-6	2-Hexanone	970		U
124-48-1	Dibromochloromethane	490		U
106-93-4	1,2-Dibromoethane	490		U
108-90-7	Chlorobenzene	490		U
630-20-6	1,1,1,2-Tetrachloroethane	490		U
100-41-4	Ethylbenzene	490		U
108-38-3	Xylene (para & meta)	490		U
95-47-6	Xylene (Ortho)	490		U
100-42-1	Styrene	490		U
75-25-2	Bromoform	490		U
98-82-8	Isopropylbenzene	490		U
108-86-1	Bromobenzene	490		U
79-34-1	1,1,2,2-Tetrachloroethane	490		U
96-18-4	1,2,3-Trichloropropane	490		U
103-65-1	n-Propylbenzene	490		U
110-57-6	trans-1,4-Dichloro-2-butene	490		U
95-49-8	2-Chlorotoluene	490		U
106-43-4	4-Chlorotoluene	490		U
108-67-8	1,3,5-Trimethylbenzene	490		U
98-06-6	tert-Butylbenzene	490		U
95-63-6	1,2,4-Trimethylbenzene	490		U
135-98-8	sec-Butylbenzene	490		U
541-73-1	1,3-Dichlorobenzene	490		U
99-87-6	4-Isopropyltoluene	490		U
106-46-7	1,4-Dichlorobenzene	490		U
95-50-1	1,2-Dichlorobenzene	490		U
04-51-8	n-Butylbenzene	490		U
67-72-1	Hexachloroethane	490		U
96-12-8	1,2-Dibromo-3-chloropropane	490		U
120-82-1	1,2,4-Trichlorobenzene	490		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	14D PCB/VOC/SVOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0004**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V02967.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/2/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	8.03 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	36

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	490		U
91-20-3	Naphthalene	490		U
87-61-6	1,2,3-Trichlorobenzene	490		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0019**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03020.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	6

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	530		U
74-87-3	Chloromethane	530		U
75-01-4	Vinyl chloride	530		U
74-83-9	Bromomethane	530		U
75-00-3	Chloroethane	530		U
75-69-4	Trichlorofluoromethane	530		U
75-35-4	1,1-Dichloroethene	270		U
67-64-1	Acetone	530		U
75-15-0	Carbon disulfide	270		U
75-09-2	Methylene chloride	270		U
156-60-5	trans-1,2-Dichloroethene	270		U
1634-04-4	Methyl-tert butyl ether	270		U
75-34-3	1,1-Dichloroethane	270		U
594-20-7	2,2-Dichloropropane	270		U
156-59-2	cis-1,2-Dichloroethene	270		U
78-93-3	2-Butanone	530		U
74-97-1	Bromochloromethane	270		U
67-66-3	Chloroform	270		U
71-55-6	1,1,1-Trichloroethane	270		U
56-23-1	Carbon tetrachloride	270		U
563-58-6	1,1-Dichloropropene	270		U
71-43-2	Benzene	270		U
107-06-2	1,2-Dichloroethane	270		U
79-01-6	Trichloroethene	270		U
78-87-1	1,2-Dichloropropane	270		U
74-95-3	Dibromomethane	270		U
75-27-4	Bromodichloromethane	270		U
10061-01-1	cis-1,3-Dichloropropene	270		U
08-10-1	4-Methyl-2-pentanone	530		U
108-88-3	Toluene	270		U
10061-02-6	trans-1,3-Dichloropropene	270		U
79-00-1	1,1,2-Trichloroethane	270		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0019**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03020.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	6

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	270		U
142-28-9	1,3-Dichloropropane	270		U
591-78-6	2-Hexanone	530		U
124-48-1	Dibromochloromethane	270		U
106-93-4	1,2-Dibromoethane	270		U
108-90-7	Chlorobenzene	270		U
630-20-6	1,1,1,2-Tetrachloroethane	270		U
100-41-4	Ethylbenzene	270		U
108-38-3	Xylene (para & meta)	270		U
95-47-6	Xylene (Ortho)	270		U
100-42-1	Styrene	270		U
75-25-2	Bromoform	270		U
98-82-8	Isopropylbenzene	270		U
108-86-1	Bromobenzene	270		U
79-34-1	1,1,2,2-Tetrachloroethane	270		U
96-18-4	1,2,3-Trichloropropane	270		U
103-65-1	n-Propylbenzene	270		U
110-57-6	trans-1,4-Dichloro-2-butene	270		U
95-49-8	2-Chlorotoluene	270		U
106-43-4	4-Chlorotoluene	270		U
108-67-8	1,3,5-Trimethylbenzene	270		U
98-06-6	tert-Butylbenzene	270		U
95-63-6	1,2,4-Trimethylbenzene	270		U
135-98-8	sec-Butylbenzene	270		U
541-73-1	1,3-Dichlorobenzene	270		U
99-87-6	4-Isopropyltoluene	270		U
106-46-7	1,4-Dichlorobenzene	270		U
95-50-1	1,2-Dichlorobenzene	270		U
04-51-8	n-Butylbenzene	270		U
67-72-1	Hexachloroethane	270		U
96-12-8	1,2-Dibromo-3-chloropropane	270		U
120-82-1	1,2,4-Trichlorobenzene	270		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0019**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03020.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	SRK	**Analysis Date**	5/4/2005 23:08:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	6

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	270		U
91-20-3	Naphthalene	270		U
87-61-6	1,2,3-Trichlorobenzene	270		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 D VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0020**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03040.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	KW	**Analysis Date**	5/6/2005 01:43:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	14

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	580		U
74-87-3	Chloromethane	580		U
75-01-4	Vinyl chloride	580		U
74-83-9	Bromomethane	580		U
75-00-3	Chloroethane	580		U
75-69-4	Trichlorofluoromethane	580		U
75-35-4	1,1-Dichloroethene	290		U
67-64-1	Acetone	580		U
75-15-0	Carbon disulfide	290		U
75-09-2	Methylene chloride	290		U
156-60-5	trans-1,2-Dichloroethene	290		U
1634-04-4	Methyl-tert butyl ether	290		U
75-34-3	1,1-Dichloroethane	290		U
594-20-7	2,2-Dichloropropane	290		U
156-59-2	cis-1,2-Dichloroethene	290		U
78-93-3	2-Butanone	580		U
74-97-1	Bromochloromethane	290		U
67-66-3	Chloroform	290		U
71-55-6	1,1,1-Trichloroethane	290		U
56-23-1	Carbon tetrachloride	290		U
563-58-6	1,1-Dichloropropene	290		U
71-43-2	Benzene	290		U
107-06-2	1,2-Dichloroethane	290		U
79-01-6	Trichloroethene	290		U
78-87-1	1,2-Dichloropropane	290		U
74-95-3	Dibromomethane	290		U
75-27-4	Bromodichloromethane	290		U
10061-01-1	cis-1,3-Dichloropropene	290		U
108-10-1	4-Methyl-2-pentanone	580		U
08-88-3	Toluene	290		U
10061-02-6	trans-1,3-Dichloropropene	290		U
79-00-1	1,1,2-Trichloroethane	290		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 D VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0020**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03040.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	KW	**Analysis Date**	5/6/2005 01:43:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	14

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
127-18-4	Tetrachloroethene	290		U
142-28-9	1,3-Dichloropropane	290		U
591-78-6	2-Hexanone	580		U
124-48-1	Dibromochloromethane	290		U
106-93-4	1,2-Dibromoethane	290		U
108-90-7	Chlorobenzene	290		U
630-20-6	1,1,1,2-Tetrachloroethane	290		U
100-41-4	Ethylbenzene	290		U
108-38-3	Xylene (para & meta)	290		U
95-47-6	Xylene (Ortho)	290		U
100-42-1	Styrene	290		U
75-25-2	Bromoform	290		U
98-82-8	Isopropylbenzene	290	140	J
108-86-1	Bromobenzene	290		U
79-34-1	1,1,2,2-Tetrachloroethane	290		U
96-18-4	1,2,3-Trichloropropane	290		U
103-65-1	n-Propylbenzene	290		U
110-57-6	trans-1,4-Dichloro-2-butene	290		U
95-49-8	2-Chlorotoluene	290		U
106-43-4	4-Chlorotoluene	290		U
108-67-8	1,3,5-Trimethylbenzene	290	140	J
98-06-6	tert-Butylbenzene	290		U
95-63-6	1,2,4-Trimethylbenzene	290		U
135-98-8	sec-Butylbenzene	290	1600	
541-73-1	1,3-Dichlorobenzene	290		U
99-87-6	4-Isopropyltoluene	290		U
106-46-7	1,4-Dichlorobenzene	290		U
95-50-1	1,2-Dichlorobenzene	290		U
104-51-8	n-Butylbenzene	290	3100	
67-72-1	Hexachloroethane	290		U
96-12-8	1,2-Dibromo-3-chloropropane	290		U
120-82-1	1,2,4-Trichlorobenzene	290		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	S18 D VOC
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501585-0020**	**Project:**	Newark Liberty Airport/Hangar 14
Lab File ID:	V03040.D	**Sample Matrix:**	Soil Medium/High
Instrument ID:	GC/MS VOA#6	**Sampling Date:**	4/29/2005
Analyst:	KW	**Analysis Date**	5/6/2005 01:43:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	MED
Sample wt/vol:	10 G	**Nominal Amount:**	100 µL
Extract Vol.	10000 (uL)	**Aliquot Analyzed:**	100 (ul)
Dilution Factor:	1	**Method:**	SW846 8260B
Sample Container:	Jar (SW-846 5035)	**Moisture(%)**	14

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
87-68-3	Hexachlorobutadiene	290		U
91-20-3	Naphthalene	290		U
87-61-6	1,2,3-Trichlorobenzene	290		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-31
S11

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: 1585-31

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7733.D

Level: (low/med) LOW Date Received:

% Moisture: 1 decanted: (Y/N): N Date Extracted: 5/3/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
108-60-1	bis(2-chloroisopropyl)ether	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-31
S11

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-31

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7733.D

Level: (low/med) LOW Date Received: _____

% Moisture: 1 decanted: (Y/N): N Date Extracted: 5/3/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	n-Nitrosodiphenylamine	340	U
122-66-7	1,2-Diphenylhydrazine(as azo)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-08	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
92-87-5	Benzidine	1700	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-32 SIL D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-32

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7740.D

Level: (low/med) LOW Date Received: _____

% Moisture: 25 decanted: (Y/N): N Date Extracted: 5/3/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	890	U
108-95-2	Phenol	890	U
111-44-4	bis(2-Chloroethyl)ether	890	U
95-57-8	2-Chlorophenol	890	U
541-73-1	1,3-Dichlorobenzene	890	U
106-46-7	1,4-Dichlorobenzene	890	U
95-50-1	1,2-Dichlorobenzene	890	U
108-60-1	bis(2-chloroisopropyl)ether	890	U
621-64-7	N-Nitroso-Di-n-propylamine	890	U
67-72-1	Hexachloroethane	890	U
98-95-3	Nitrobenzene	890	U
78-59-1	Isophorone	890	U
88-75-5	2-Nitrophenol	890	U
105-67-9	2,4-Dimethylphenol	890	U
111-91-1	bis(2-Chloroethoxy)methane	890	U
120-83-2	2,4-Dichlorophenol	890	U
120-82-1	1,2,4-Trichlorobenzene	890	U
91-20-3	Naphthalene	450	J
87-68-3	Hexachlorobutadiene	890	U
59-50-7	4-Chloro-3-methylphenol	890	U
77-47-4	Hexachlorocyclopentadiene	890	U
88-06-2	2,4,6-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	890	U
131-11-3	Dimethylphthalate	890	U
208-96-8	Acenaphthylene	890	U
606-20-2	2,6-Dinitrotoluene	890	U
83-32-9	Acenaphthene	890	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	2200	U
121-14-2	2,4-Dinitrotoluene	890	U
84-66-2	Diethylphthalate	890	U
86-73-7	Fluorene	890	U
7005-72-3	4-Chlorophenyl-phenylether	890	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-32 SIL D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-32

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7740.D

Level: (low/med) LOW Date Received: _____

% Moisture: 25 decanted: (Y/N): N Date Extracted: 5/3/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
534-52-1	4,6-Dinitro-2-methylphenol	2200	U
86-30-6	n-Nitrosodiphenylamine	890	U
122-66-7	1,2-Diphenylhydrazine(as azo)	890	U
101-55-3	4-Bromophenyl-phenylether	890	U
118-74-1	Hexachlorobenzene	890	U
87-86-5	Pentachlorophenol	2200	U
85-01-08	Phenanthrene	890	U
120-12-7	Anthracene	890	U
84-74-2	Di-n-butylphthalate	890	U
206-44-0	Fluoranthene	360	J
92-87-5	Benzidine	4500	U
129-00-0	Pyrene	400	J
85-68-7	Butylbenzylphthalate	890	U
56-55-3	Benzo[a]anthracene	310	J
91-94-1	3,3'-Dichlorobenzidine	1800	U
218-01-9	Chrysene	360	J
117-81-7	bis(2-Ethylhexyl)phthalate	890	U
117-84-0	Di-n-octylphthalate	890	U
205-99-2	Benzo[b]fluoranthene	460	J
207-08-9	Benzo[k]fluoranthene	890	U
50-32-8	Benzo[a]pyrene	340	J
193-39-5	Indeno[1,2,3-cd]pyrene	320	J
53-70-3	Dibenz[a,h]anthracene	890	U
191-24-2	Benzo[g,h,i]perylene	350	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-1
S13

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-1

Sample wt/vol: 30.0 (g/mL G Lab File ID: C7722.D

Level: (low/med) LOW Date Received: _____

% Moisture: 1 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
108-60-1	bis(2-chloroisopropyl)ether	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-1
513

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-1

Sample wt/vol: 30.0 (g/mL G Lab File ID: C7722.D

Level: (low/med) LOW Date Received: _____

% Moisture: 1 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	n-Nitrosodiphenylamine	340	U
122-66-7	1,2-Diphenylhydrazine(as azo)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-08	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
92-87-5	Benzidine	1700	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-3
S13 D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-3

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7726.D

Level: (low/med) LOW Date Received: _____

% Moisture: 27 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	910	U
108-95-2	Phenol	910	U
111-44-4	bis(2-Chloroethyl)ether	910	U
95-57-8	2-Chlorophenol	910	U
541-73-1	1,3-Dichlorobenzene	910	U
106-46-7	1,4-Dichlorobenzene	910	U
95-50-1	1,2-Dichlorobenzene	910	U
108-60-1	bis(2-chloroisopropyl)ether	910	U
621-64-7	N-Nitroso-Di-n-propylamine	910	U
67-72-1	Hexachloroethane	910	U
98-95-3	Nitrobenzene	910	U
78-59-1	Isophorone	910	U
88-75-5	2-Nitrophenol	910	U
105-67-9	2,4-Dimethylphenol	910	U
111-91-1	bis(2-Chloroethoxy)methane	910	U
120-83-2	2,4-Dichlorophenol	910	U
120-82-1	1,2,4-Trichlorobenzene	910	U
91-20-3	Naphthalene	390	J
87-68-3	Hexachlorobutadiene	910	U
59-50-7	4-Chloro-3-methylphenol	910	U
77-47-4	Hexachlorocyclopentadiene	910	U
88-06-2	2,4,6-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	910	U
131-11-3	Dimethylphthalate	910	U
208-96-8	Acenaphthylene	390	J
606-20-2	2,6-Dinitrotoluene	910	U
83-32-9	Acenaphthene	700	J
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	2300	U
121-14-2	2,4-Dinitrotoluene	910	U
84-66-2	Diethylphthalate	910	U
86-73-7	Fluorene	1600	
7005-72-3	4-Chlorophenyl-phenylether	910	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-3
513 D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-3

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7726.D

Level: (low/med) LOW Date Received: _____

% Moisture: 27 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
86-30-6	n-Nitrosodiphenylamine	910	U
122-66-7	1,2-Diphenylhydrazine(as azo)	910	U
101-55-3	4-Bromophenyl-phenylether	910	U
118-74-1	Hexachlorobenzene	910	U
87-86-5	Pentachlorophenol	2300	U
85-01-08	Phenanthrene	9000	
120-12-7	Anthracene	1900	
84-74-2	Di-n-butylphthalate	910	U
206-44-0	Fluoranthene	9000	
92-87-5	Benzidine	4600	U
129-00-0	Pyrene	6400	
85-68-7	Butylbenzylphthalate	910	U
56-55-3	Benzo[a]anthracene	3400	
91-94-1	3,3'-Dichlorobenzidine	1800	U
218-01-9	Chrysene	3400	
117-81-7	bis(2-Ethylhexyl)phthalate	910	U
117-84-0	Di-n-octylphthalate	910	U
205-99-2	Benzo[b]fluoranthene	3100	
207-08-9	Benzo[k]fluoranthene	1200	
50-32-8	Benzo[a]pyrene	2900	
193-39-5	Indeno[1,2,3-cd]pyrene	1900	
53-70-3	Dibenz[a,h]anthracene	910	U
191-24-2	Benzo[g,h,i]perylene	1600	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-2

514

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-2

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7721.D

Level: (low/med) LOW Date Received: _____

% Moisture: 2 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
108-60-1	bis(2-chloroisopropyl)ether	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-2
S14

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-2

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7721.D

Level: (low/med) LOW Date Received: _____

% Moisture: 2 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	n-Nitrosodiphenylamine	340	U
122-66-7	1,2-Diphenylhydrazine(as azo)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	850	U
85-01-08	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
92-87-5	Benzidine	1700	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-4
514D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-4

Sample wt/vol: 30.0 (g/mL G Lab File ID: C7730.D

Level: (low/med) LOW Date Received: _____

% Moisture: 36 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	2600	U
108-95-2	Phenol	2600	U
111-44-4	bis(2-Chloroethyl)ether	2600	U
95-57-8	2-Chlorophenol	2600	U
541-73-1	1,3-Dichlorobenzene	2600	U
106-46-7	1,4-Dichlorobenzene	2600	U
95-50-1	1,2-Dichlorobenzene	2600	U
108-60-1	bis(2-chloroisopropyl)ether	2600	U
621-64-7	N-Nitroso-Di-n-propylamine	2600	U
67-72-1	Hexachloroethane	2600	U
98-95-3	Nitrobenzene	2600	U
78-59-1	Isophorone	2600	U
88-75-5	2-Nitrophenol	2600	U
105-67-9	2,4-Dimethylphenol	2600	U
111-91-1	bis(2-Chloroethoxy)methane	2600	U
120-83-2	2,4-Dichlorophenol	2600	U
120-82-1	1,2,4-Trichlorobenzene	2600	U
91-20-3	Naphthalene	2600	U
87-68-3	Hexachlorobutadiene	2600	U
59-50-7	4-Chloro-3-methylphenol	2600	U
77-47-4	Hexachlorocyclopentadiene	2600	U
88-06-2	2,4,6-Trichlorophenol	2600	U
91-58-7	2-Chloronaphthalene	2600	U
131-11-3	Dimethylphthalate	2600	U
208-96-8	Acenaphthylene	2600	U
606-20-2	2,6-Dinitrotoluene	2600	U
83-32-9	Acenaphthene	2600	U
51-28-5	2,4-Dinitrophenol	6500	U
100-02-7	4-Nitrophenol	6500	U
121-14-2	2,4-Dinitrotoluene	2600	U
84-66-2	Diethylphthalate	2600	U
86-73-7	Fluorene	2600	U
7005-72-3	4-Chlorophenyl-phenylether	2600	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-4
514 D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-4

Sample wt/vol: 30.0 (g/mL G Lab File ID: C7730.D

Level: (low/med) LOW Date Received: _____

% Moisture: 36 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/4/05

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	6500	U
86-30-6	n-Nitrosodiphenylamine	2600	U
122-66-7	1,2-Diphenylhydrazine(as azo)	2600	U
101-55-3	4-Bromophenyl-phenylether	2600	U
118-74-1	Hexachlorobenzene	2600	U
87-86-5	Pentachlorophenol	6500	U
85-01-08	Phenanthrene	2600	U
120-12-7	Anthracene	2600	U
84-74-2	Di-n-butylphthalate	2600	U
206-44-0	Fluoranthene	1300	J
92-87-5	Benzidine	13000	U
129-00-0	Pyrene	1200	J
85-68-7	Butylbenzylphthalate	2600	U
56-55-3	Benzo[a]anthracene	2600	U
91-94-1	3,3'-Dichlorobenzidine	5200	U
218-01-9	Chrysene	2600	U
117-81-7	bis(2-Ethylhexyl)phthalate	2600	U
117-84-0	Di-n-octylphthalate	2600	U
205-99-2	Benzo[b]fluoranthene	970	J
207-08-9	Benzo[k]fluoranthene	2600	U
50-32-8	Benzo[a]pyrene	2600	U
193-39-5	Indeno[1,2,3-cd]pyrene	2600	U
53-70-3	Dibenz[a,h]anthracene	2600	U
191-24-2	Benzo[g,h,i]perylene	2600	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-21
518

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-21

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7725.D

Level: (low/med) LOW Date Received: _____

% Moisture: 7 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	710	U
108-95-2	Phenol	710	U
111-44-4	bis(2-Chloroethyl)ether	710	U
95-57-8	2-Chlorophenol	710	U
541-73-1	1,3-Dichlorobenzene	710	U
106-46-7	1,4-Dichlorobenzene	710	U
95-50-1	1,2-Dichlorobenzene	710	U
108-60-1	bis(2-chloroisopropyl)ether	710	U
621-64-7	N-Nitroso-Di-n-propylamine	710	U
67-72-1	Hexachloroethane	710	U
98-95-3	Nitrobenzene	710	U
78-59-1	Isophorone	710	U
88-75-5	2-Nitrophenol	710	U
105-67-9	2,4-Dimethylphenol	710	U
111-91-1	bis(2-Chloroethoxy)methane	710	U
120-83-2	2,4-Dichlorophenol	710	U
120-82-1	1,2,4-Trichlorobenzene	710	U
91-20-3	Naphthalene	710	U
87-68-3	Hexachlorobutadiene	710	U
59-50-7	4-Chloro-3-methylphenol	710	U
77-47-4	Hexachlorocyclopentadiene	710	U
88-06-2	2,4,6-Trichlorophenol	710	U
91-58-7	2-Chloronaphthalene	710	U
131-11-3	Dimethylphthalate	710	U
208-96-8	Acenaphthylene	710	U
606-20-2	2,6-Dinitrotoluene	710	U
83-32-9	Acenaphthene	710	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
121-14-2	2,4-Dinitrotoluene	710	U
84-66-2	Diethylphthalate	710	U
86-73-7	Fluorene	710	U
7005-72-3	4-Chlorophenyl-phenylether	710	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-21 S18

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-21

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7725.D

Level: (low/med) LOW Date Received: _____

% Moisture: 7 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	n-Nitrosodiphenylamine	710	U
122-66-7	1,2-Diphenylhydrazine(as azo)	710	U
101-55-3	4-Bromophenyl-phenylether	710	U
118-74-1	Hexachlorobenzene	710	U
87-86-5	Pentachlorophenol	1800	U
85-01-08	Phenanthrene	710	U
120-12-7	Anthracene	710	U
84-74-2	Di-n-butylphthalate	710	U
206-44-0	Fluoranthene	710	U
92-87-5	Benzidine	3600	U
129-00-0	Pyrene	710	U
85-68-7	Butylbenzylphthalate	710	U
56-55-3	Benzo[a]anthracene	710	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
218-01-9	Chrysene	710	U
117-81-7	bis(2-Ethylhexyl)phthalate	710	U
117-84-0	Di-n-octylphthalate	710	U
205-99-2	Benzo[b]fluoranthene	710	U
207-08-9	Benzo[k]fluoranthene	710	U
50-32-8	Benzo[a]pyrene	710	U
193-39-5	Indeno[1,2,3-cd]pyrene	710	U
53-70-3	Dibenz[a,h]anthracene	710	U
191-24-2	Benzo[g,h,i]perylene	710	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-22
S18 D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-22

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7723.D

Level: (low/med) LOW Date Received: _____

% Moisture: 11 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-nitrosodimethylamine	750	U
108-95-2	Phenol	750	U
111-44-4	bis(2-Chloroethyl)ether	750	U
95-57-8	2-Chlorophenol	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
95-50-1	1,2-Dichlorobenzene	750	U
108-60-1	bis(2-chloroisopropyl)ether	750	U
621-64-7	N-Nitroso-Di-n-propylamine	750	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	750	U
78-59-1	Isophorone	750	U
88-75-5	2-Nitrophenol	750	U
105-67-9	2,4-Dimethylphenol	750	U
111-91-1	bis(2-Chloroethoxy)methane	750	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	750	U
87-68-3	Hexachlorobutadiene	750	U
59-50-7	4-Chloro-3-methylphenol	750	U
77-47-4	Hexachlorocyclopentadiene	750	U
88-06-2	2,4,6-Trichlorophenol	750	U
91-58-7	2-Chloronaphthalene	750	U
131-11-3	Dimethylphthalate	750	U
208-96-8	Acenaphthylene	750	U
606-20-2	2,6-Dinitrotoluene	750	U
83-32-9	Acenaphthene	750	U
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
121-14-2	2,4-Dinitrotoluene	750	U
84-66-2	Diethylphthalate	750	U
86-73-7	Fluorene	750	U
7005-72-3	4-Chlorophenyl-phenylether	750	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1585-22
518 D

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1585-22

Sample wt/vol: 30.1 (g/mL G Lab File ID: C7723.D

Level: (low/med) LOW Date Received: _____

% Moisture: 11 decanted: (Y/N): N Date Extracted: 5/2/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/3/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	n-Nitrosodiphenylamine	750	U
122-66-7	1,2-Diphenylhydrazine(as azo)	750	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	750	U
87-86-5	Pentachlorophenol	1900	U
85-01-08	Phenanthrene	1000	
120-12-7	Anthracene	750	U
84-74-2	Di-n-butylphthalate	430	J
206-44-0	Fluoranthene	1000	
92-87-5	Benzidine	3800	U
129-00-0	Pyrene	780	
85-68-7	Butylbenzylphthalate	750	U
56-55-3	Benzo[a]anthracene	300	J
91-94-1	3,3'-Dichlorobenzidine	1500	U
218-01-9	Chrysene	320	J
117-81-7	bis(2-Ethylhexyl)phthalate	1700	
117-84-0	Di-n-octylphthalate	610	J
205-99-2	Benzo[b]fluoranthene	270	J
207-08-9	Benzo[k]fluoranthene	750	U
50-32-8	Benzo[a]pyrene	750	U
193-39-5	Indeno[1,2,3-cd]pyrene	750	U
53-70-3	Dibenz[a,h]anthracene	750	U
191-24-2	Benzo[g,h,i]perylene	750	U

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

MW-2A

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Water Lab Sample ID: 1794-4

Sample wt/vol: 970 (g/mL) mL Lab File ID: H1963

% Moisture: N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 05/19/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/25/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

H_2SO_4 Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/L	Q
12674-11-2	Aroclor-1016		0.48	U
11104-28-2	Aroclor-1221		0.47	U
11141-16-5	Aroclor-1232		0.39	U
53469-21-9	Aroclor-1242		0.14	U
12672-29-6	Aroclor-1248		0.21	U
11097-69-1	Aroclor-1254		0.16	U
11096-82-5	Aroclor-1260		0.45	U

N/A = Not Applicable

U = Not detected

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.: MW-4

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Water Lab Sample ID: 1794-3

Sample wt/vol: 970 (g/mL) mL Lab File ID: H1962

% Moisture: N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 05/19/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/25/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

H_2SO_4 Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/L	Q
12674-11-2	Aroclor-1016		0.48	U
11104-28-2	Aroclor-1221		0.47	U
11141-16-5	Aroclor-1232		0.39	U
53469-21-9	Aroclor-1242		0.14	U
12672-29-6	Aroclor-1248		0.21	U
11097-69-1	Aroclor-1254		0.16	U
11096-82-5	Aroclor-1260		0.45	U

N/A = Not Applicable

U = Not detected

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

MW-15

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Water Lab Sample ID: 1794-1

Sample wt/vol: 980 (g/mL) mL Lab File ID: H1960

% Moisture: N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 05/19/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/25/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

H_2SO_4 Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.47	U
11141-16-5	Aroclor-1232	0.39	U
53469-21-9	Aroclor-1242	0.14	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.16	U
11096-82-5	Aroclor-1260	0.45	U

N/A = Not Applicable

U = Not detected

1D

PCB ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

MW-23

Lab Name: EMSL ANALYTICAL Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Matrix: (soil/water) Water Lab Sample ID: 1794-2

Sample wt/vol: 980 (g/mL) mL Lab File ID: H1961

% Moisture: N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 05/19/05

Concentrated Extract Volume: 10 (ml) Date Analyzed: 05/25/05

Injection Volume: 1 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

H_2SO_4 Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.48	U
11104-28-2	Aroclor-1221	0.47	U
11141-16-5	Aroclor-1232	0.39	U
53469-21-9	Aroclor-1242	0.14	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.16	U
11096-82-5	Aroclor-1260	0.45	U

N/A = Not Applicable

U = Not detected

EMSL Analytical Inc.

PESTICIDE/PCB ORGANICS ANALYSIS DATA SHEET

Customer Sample#: MW-24

Lab Name:	EMSL Analytical		
EMSL Sample ID:	010504247-0002	**Project:**	MW-24 & FB
Lab File ID:	G4721.D	**Sample Matrix:**	Waste Water
Instrument ID:	G	**Sampling Date:**	10/19/05
Analyst:	TL	**Date Extracted:**	10/25/05
GC Column:	CLPest I (0.32 mm)	**Analysis Date**	10/27/05 04:39:00
GC Column 2:	CLPest II (0.32 mm)	**Sample wt/vol:**	960 ML
% Moisture:		**Dilution Factor:**	20
PH:		**Concentrated Extract Vol:**	10 (ml)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Extraction Type:	SepF	**Sulfur Cleanup:**	N
Method:	SW846 8081/8082		

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
12674-11-2	Aroclor-1016	21		U
11104-28-2	Aroclor-1221	21		U
11141-16-5	Aroclor-1232	21		U
53469-21-9	Aroclor-1242	21		U
12672-29-6	Aroclor-1248	21		U
11097-69-1	Aroclor-1254	21		U
11096-82-5	Aroclor-1260	21		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

Printed: 10/28/05 03:10:21 PM
SampleList: 102605G
ERM: K:\AA GC ERMs\HPG\PCBSoil1013G2.erm

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24 2A
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0004**	**Project:**	8513.002
Lab File ID:	T3888.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 20:03:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35		U
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31	0.38	
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24 2A
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0004**	**Project:**	8513.002
Lab File ID:	T3888.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 20:03:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-4
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0003**	**Project:**	8513.002
Lab File ID:	T3887.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 19:24:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35		U
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23	0.86	
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-4
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0003**	**Project:**	8513.002
Lab File ID:	T3887.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 19:24:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-15
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0001**	**Project:**	8513.002
Lab File ID:	T3886.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 18:46:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35		U
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21	0.65	
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U
541-73-1	1,3-Dichlorobenzene	0.36		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-15
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0001**	**Project:**	8513.002
Lab File ID:	T3886.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 18:46:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-23
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0002**	**Project:**	8513.002
Lab File ID:	T3875.D	**Sample Matrix:**	Water
Instrument ID:	GCMS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/18/2005 21:40:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35	0.56	B
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-23
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0002**	**Project:**	8513.002
Lab File ID:	T3875.D	**Sample Matrix:**	Water
Instrument ID:	GCMS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/18/2005 21:40:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4 Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	FB
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0005**	**Project:**	8513.002
Lab File ID:	T3884.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 17:28:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35		U
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33	1.1	
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	FB
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0005**	**Project:**	8513.002
Lab File ID:	T3884.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 17:28:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25	0.27	
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	TB
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0006**	**Project:**	8513.002
Lab File ID:	T3885.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 18:07:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35	0.44	B
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	TB
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**010501794-0006**	**Project:**	8513.002
Lab File ID:	T3885.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	5/13/2005
Analyst:	KW	**Analysis Date**	5/19/2005 18:07:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3883.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/19/2005 16:50:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35	0.52	
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3883.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/19/2005 16:50:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTAIVELY IDENTIFIED COMPOUNDS

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3883.D	**Sample Matrix:**	Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/19/2005 16:50:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624
Compounds Found:	**0**		

CAS NO	COMPOUND NAME	RT	EST. CONC. (µg/L)	Q
	No Compounds Found			

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3865.D	**Sample Matrix:**	Water
Instrument ID:	GCMS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/18/2005 15:11:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35	0.63	
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
1634-04-4	Methyl-tert butyl ether	0.27		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
78-93-3	2-Butanone	0.53		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23		U
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3865.D	**Sample Matrix:**	Water
Instrument ID:	GCMS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/18/2005 15:11:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U
541-73-1	1,3-Dichlorobenzene	0.36		U
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTAIVELY IDENTIFIED COMPOUNDS

		Customer Sample#:	VBLK01
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	**M BLANK**	**Project:**	
Lab File ID:	T3865.D	**Sample Matrix:**	Water
Instrument ID:	GCMS VOA#5	**Sampling Date:**	
Analyst:	KW	**Analysis Date**	5/18/2005 15:11:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624
Compounds Found:	0		

CAS NO	COMPOUND NAME	RT	EST. CONC. (µg/L)	Q
	No Compounds Found			

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration.

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010504247-0002	**Project:**	MW-24 & FB
Lab File ID:	T5118.D	**Sample Matrix:**	Waste Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	10/19/2005
Analyst:	SRK	**Analysis Date**	10/26/2005 19:04:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
74-87-3	Chloromethane	0.86		U
75-01-4	Vinyl chloride	1.2		U
74-83-9	Bromomethane	0.52		U
75-00-3	Chloroethane	0.41		U
75-69-4	Trichlorofluoromethane	0.59		U
107-02-8	Acrolein	15		U
75-35-4	1,1-Dichloroethene	0.33		U
75-09-2	Methylene chloride	0.35		U
107-13-1	Acrylonitrile	1.2		U
156-60-5	trans-1,2-Dichloroethene	0.42		U
75-34-3	1,1-Dichloroethane	0.34		U
156-59-4	cis-1,2-Dichloroethene	0.29		U
67-66-3	Chloroform	0.30		U
71-55-6	1,1,1-Trichloroethane	0.44		U
56-23-5	Carbon tetrachloride	0.39		U
71-43-2	Benzene	0.23		U
107-06-2	1,2-Dichloroethane	0.29		U
79-01-6	Trichloroethene	0.37		U
78-87-5	1,2-Dichloropropane	0.23	1.8	
75-27-4	Bromodichloromethane	0.31		U
110-75-8	2-Chloroethyl vinyl ether	0.49		U
10061-01-5	cis-1,3-Dichloropropene	0.54		U
108-88-3	Toluene	0.33		U
10061-02-6	trans-1,3-Dichloropropene	0.55		U
79-00-5	1,1,2-Trichloroethane	0.32		U
127-18-4	Tetrachloroethene	0.34		U
124-48-1	Dibromochloromethane	0.27		U
108-90-7	Chlorobenzene	0.21		U
100-41-4	Ethylbenzene	0.20		U
108-38-3	Xylene (para & meta)	0.61		U
95-47-6	Xylene (ortho)	0.31		U
75-25-2	Bromoform	0.36		U
79-34-5	1,1,2,2-Tetrachloroethane	0.27		U
541-73-1	1,3-Dichlorobenzene	0.36		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010504247-0002	**Project:**	MW-24 & FB
Lab File ID:	T5118.D	**Sample Matrix:**	Waste Water
Instrument ID:	GC/MS VOA#5	**Sampling Date:**	10/19/2005
Analyst:	SRK	**Analysis Date**	10/26/2005 19:04:00
GC Column:	RTX-502.2 (0.25 mm)	**Level (low/med):**	LOW
Sample wt/vol:	5 ML	**Nominal Amount:**	5 ML
Dilution Factor:	1	**Method:**	EPA 624

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	0.25		U
95-50-1	1,2-Dichlorobenzene	0.37		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated Concentration. Detected below Practical Quantitation Level

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-4
MW-2A

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 1794-4

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7937.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	5	U
111-44-4	bis(2-Chloroethyl)ether	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	3	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	2	U
111-91-1	bis(2-Chloroethoxy)methane	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	5	U
91-58-7	2-Chloronaphthalene	2	U
131-11-3	Dimethylphthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	2	
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	2	U
86-73-7	Fluorene	2	U
7005-72-3	4-Chlorophenyl-phenylether	2	U
86-30-6	n-Nitrosodiphenylamine	3	U
122-66-7	1,2-Diphenylhydrazine(as azo)	2	U
101-55-3	4-Bromophenyl-phenylether	1	U
118-74-1	Hexachlorobenzene	1	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	1	U
84-74-2	Di-n-butylphthalate	2	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-4
MW-2A

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 1794-4

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7937.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	2	U
56-55-3	Benzo[a]anthracene	1	U
91-94-1	3,3'-Dichlorobenzidine	5	U
218-01-9	Chrysene	1	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	U
117-84-0	Di-n-octylphthalate	6	U
205-99-2	Benzo[b]fluoranthene	3	U
207-08-9	Benzo[k]fluoranthene	5	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	6	U
53-70-3	Dibenz[a,h]anthracene	4	U
191-24-2	Benzo[g,h,i]perylene	6	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-3
MW-4

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 1794-3

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7942.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	14	U
108-95-2	Phenol	7	U
111-44-4	bis(2-Chloroethyl)ether	7	U
95-57-8	2-Chlorophenol	6	U
541-73-1	1,3-Dichlorobenzene	7	U
106-46-7	1,4-Dichlorobenzene	9	U
95-50-1	1,2-Dichlorobenzene	9	U
108-60-1	bis(2-chloroisopropyl)ether	8	U
621-64-7	N-Nitroso-Di-n-propylamine	5	U
67-72-1	Hexachloroethane	6	U
98-95-3	Nitrobenzene	8	U
78-59-1	Isophorone	7	U
88-75-5	2-Nitrophenol	4	U
105-67-9	2,4-Dimethylphenol	8	U
111-91-1	bis(2-Chloroethoxy)methane	6	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	7	U
91-20-3	Naphthalene	6	U
87-68-3	Hexachlorobutadiene	6	U
59-50-7	4-Chloro-3-methylphenol	6	U
77-47-4	Hexachlorocyclopentadiene	15	U
88-06-2	2,4,6-Trichlorophenol	6	U
91-58-7	2-Chloronaphthalene	5	U
131-11-3	Dimethylphthalate	6	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	6	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	11	U
100-02-7	4-Nitrophenol	15	U
121-14-2	2,4-Dinitrotoluene	8	U
84-66-2	Diethylphthalate	5	U
86-73-7	Fluorene	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-3 MW-4

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 1794-3

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7942.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) N pH:

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
534-52-1	4,6-Dinitro-2-methylphenol	7	U
86-30-6	n-Nitrosodiphenylamine	9	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	4	U
118-74-1	Hexachlorobenzene	4	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	5	U
120-12-7	Anthracene	4	U
84-74-2	Di-n-butylphthalate	6	U
206-44-0	Fluoranthene	4	U
92-87-5	Benzidine	31	U
129-00-0	Pyrene	6	U
85-68-7	Butylbenzylphthalate	6	U
56-55-3	Benzo[a]anthracene	4	U
91-94-1	3,3'-Dichlorobenzidine	16	U
218-01-9	Chrysene	4	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	
117-84-0	Di-n-octylphthalate	8	J
205-99-2	Benzo[b]fluoranthene	5	J
207-08-9	Benzo[k]fluoranthene	14	U
50-32-8	Benzo[a]pyrene	3	J
193-39-5	Indeno[1,2,3-cd]pyrene	19	U
53-70-3	Dibenz[a,h]anthracene	11	U
191-24-2	Benzo[g,h,i]perylene	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-1
MW-15

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 1794-1

Sample wt/vol: 980.0 (g/mL ML Lab File ID: C7939.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	9	U
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	6	U
95-50-1	1,2-Dichlorobenzene	6	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	3	U
67-72-1	Hexachloroethane	4	U
98-95-3	Nitrobenzene	6	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	8	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	3	U
131-11-3	Dimethylphthalate	4	U
208-96-8	Acenaphthylene	3	U
606-20-2	2,6-Dinitrotoluene	4	U
83-32-9	Acenaphthene	3	U
51-28-5	2,4-Dinitrophenol	7	U
100-02-7	4-Nitrophenol	10	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	3	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-1
MW-15

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 1794-1

Sample wt/vol: 980.0 (g/mL ML Lab File ID: C7939.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	5	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	4	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	3	U
87-86-5	Pentachlorophenol	16	U
85-01-08	Phenanthrene	3	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	3	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	11	U
218-01-9	Chrysene	3	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo[b]fluoranthene	6	U
207-08-9	Benzo[k]fluoranthene	9	U
50-32-8	Benzo[a]pyrene	4	U
193-39-5	Indeno[1,2,3-cd]pyrene	13	U
53-70-3	Dibenz[a,h]anthracene	8	U
191-24-2	Benzo[g,h,i]perylene	11	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-2
MW-23

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 1794-2

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7938.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	9	U
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	4	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	6	U
95-50-1	1,2-Dichlorobenzene	6	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	3	U
67-72-1	Hexachloroethane	4	U
98-95-3	Nitrobenzene	6	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	8	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	3	U
131-11-3	Dimethylphthalate	4	U
208-96-8	Acenaphthylene	3	U
606-20-2	2,6-Dinitrotoluene	4	U
83-32-9	Acenaphthene	3	U
51-28-5	2,4-Dinitrophenol	7	U
100-02-7	4-Nitrophenol	10	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	4	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	4	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1794-2

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 1794-2

Sample wt/vol: 970.0 (g/mL ML Lab File ID: C7938.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/18/05

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/23/05

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	5	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	4	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	3	U
87-86-5	Pentachlorophenol	16	U
85-01-08	Phenanthrene	4	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	3	U
92-87-5	Benzidine	21	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	11	U
218-01-9	Chrysene	3	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo[b]fluoranthene	6	U
207-08-9	Benzo[k]fluoranthene	9	U
50-32-8	Benzo[a]pyrene	4	U
193-39-5	Indeno[1,2,3-cd]pyrene	13	U
53-70-3	Dibenz[a,h]anthracene	8	U
191-24-2	Benzo[g,h,i]perylene	11	U

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24
Lab Name:	EMSL Analytical Inc.		
EMSL Sample ID:	**010504247-0002**	**Project:**	MW-24 & FB
Lab File ID:	C9330.D	**Sample Matrix:**	Waste Water
Instrument ID:	MSD-C	**Sampling Date:**	10/19/2005
Analyst:	WRF	**Date Extracted:**	10/24/2005
GC Column:	ZB-5MS (0.25 mm)	**Analysis Date**	10/27/2005 1:15:00 PM
Level (low/med):	LOW	**Sample wt/vol:**	925 ML
% Moisture:		**Dilution Factor:**	1
PH:		**Conc. Extract Volume:**	1000 (ul)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Method:	625ABN		

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
62-75-9	N-nitrosodimethylamine	5.4		U
108-95-2	Phenol	1.2		U
111-44-4	bis(2-Chloroethyl)ether	1.6		U
95-57-8	2-Chlorophenol	2.2		U
541-73-1	1,3-Dichlorobenzene	1.4		U
106-46-7	1,4-Dichlorobenzene	1.4		U
95-50-1	1,2-Dichlorobenzene	1.3		U
108-60-1	bis(2-chloroisopropyl)ether	1.7		U
621-64-7	N-Nitroso-Di-n-propylamine	1.3		U
67-72-1	Hexachloroethane	1.4		U
98-95-3	Nitrobenzene	1.8		U
78-59-1	Isophorone	1.5		U
88-75-5	2-Nitrophenol	2.3		U
105-67-9	2,4-Dimethylphenol	2.2		U
111-91-1	bis(2-Chloroethoxy)methane	2.4		U
120-83-2	2,4-Dichlorophenol	2.6		U
120-82-1	1,2,4-Trichlorobenzene	1.5		U
91-20-3	Naphthalene	1.5		U
87-68-3	Hexachlorobutadiene	1.7		U
59-50-7	4-Chloro-3-methylphenol	2.4		U
91-58-7	2-Chloronaphthalene	2.4		U
77-47-4	Hexachlorocyclopentadiene	1.4		U
88-06-2	2,4,6-Trichlorophenol	2.4		U
131-11-3	Dimethylphthalate	1.5		U
208-96-8	Acenaphthylene	3.9		U
606-20-2	2,6-Dinitrotoluene	1.5		U
83-32-9	Acenaphthene	1.8		U
51-28-5	2,4-Dinitrophenol	2.3		U
100-02-7	4-Nitrophenol	1.6		U
121-14-2	2,4-Dinitrotoluene	3.7		U
84-66-2	Diethylphthalate	2.5		U
86-73-7	Fluorene	1.6		U

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-24
Lab Name:	EMSL Analytical Inc.		
EMSL Sample ID:	**010504247-0002**	**Project:**	MW-24 & FB
Lab File ID:	C9330.D	**Sample Matrix:**	Waste Water
Instrument ID:	MSD-C	**Sampling Date:**	10/19/2005
Analyst:	WRF	**Date Extracted:**	10/24/2005
GC Column:	ZB-5MS (0.25 mm)	**Analysis Date**	10/27/2005 1:15:00 PM
Level (low/med):	LOW	**Sample wt/vol:**	925 ML
% Moisture:		**Dilution Factor:**	1
PH:		**Conc. Extract Volume:**	1000 (ul)
GPC Cleanup(Y/N):	N	**Injection Volume:**	1 (ul)
Method:	625ABN		

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
7005-72-3	4-Chlorophenyl-phenylether	1.9		U
534-52-1	4,6-Dinitro-2-methylphenol	2.0		U
86-30-6	n-Nitrosodiphenylamine	1.8		U
122-66-7	1,2-Diphenylhydrazine (as azobenzine)	1.7		U
101-55-3	4-Bromophenyl-phenylether	1.8		U
18-74-1	Hexachlorobenzene	1.9		U
87-86-5	Pentachlorophenol	2.1		U
85-01-08	Phenanthrene	1.8		U
120-12-7	Anthracene	1.7		U
84-74-2	Di-n-butylphthalate	2.0		U
206-44-0	Fluoranthene	1.9		U
92-87-5	Benzidine	7.4		U
129-00-0	Pyrene	1.8		U
85-68-7	Butylbenzylphthalate	2.0		U
56-55-3	Benzo[a]anthracene	1.8		U
91-94-1	3,3'-Dichlorobenzidine	4.0		U
218-01-9	Chrysene	2.1		U
117-81-7	bis(2-Ethylhexyl)phthalate	2.2		U
117-84-0	Di-n-octylphthalate	2.0		U
205-99-2	Benzo[b]fluoranthene	2.0		U
207-08-9	Benzo[k]fluoranthene	1.8		U
50-32-8	Benzo[a]pyrene	1.7		U
193-39-5	Indeno[1,2,3-cd]pyrene	2.3		U
53-70-3	Dibenz[a,h]anthracene	1.9		U
191-24-2	Benzo[g,h,i]perylene	1.9		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
' = Estimated Concentration. Detected below Practical Quantitation Level